EXHIBIT 16: PERFORMANCE REQUIREMENTS

I. TABLE 1-1: DEFECT HAZARD NONCOMPLIANCE EVENTS

Event No.	Event	Breach of Failure to Meet the Following Minimum Performance Requirements:	Number of Noncompliance Points		Cure Period	Interval of
NO.			Mainlanes	All Other Lanes		Recurrence
1-1.01		Respond to and initiate traffic control to secure sites of Incidents, Emergencies, accidents, and other events that result in a condition that is unsafe and/or may present a life threatening condition, such as at a minimum, fuel spills, debris, pavement failure (e.g. pot holes, etc.), flooding, guardrail failures, attenuator faults, and other events.	15	10	30 Min	30 Min
	Incident response	Provide all necessary equipment, staff and resources to clean up and open the travel lanes at the sites of Incidents, Emergencies, accidents and other events such as, at a minimum, fuel spills, debris, pavement failure (e.g. pot holes, etc.), flooding, guardrail failures, attenuator faults, and other events after release by the Emergency Services agency in order to correct the event and provide a safe passage for the traveling public.	15	10	2 Hours	Hourly
1-1.02	Roadway operations (broken down or stranded vehicles)	Notify law enforcement of broken down or stranded vehicles in travel lanes and initiate traffic control to secure the site until travel lanes are cleared. Assist in the removal of vehicles from the travel lanes.	10	5	30 Min	Hourly

Event	Event	Breach of Failure to Meet the Following	Numbe Noncomp Point	liance	Cure Period	Interval of	
No.		Minimum Performance Requirements:	Mainlanes	All Other Lanes		Recurrence	
1-1.03	Roadway surface debris - normal	Remove and dispose of debris from travel lanes that would potentially cause a safety hazard to the traveling public, including at a minimum, objects, dead animals and tires.	15	10	30 Min	30 Min	
1-1.04	Roadway surface debris - large	Debris too large to be removed within the above timeframe will require that the roadway be closed and then such debris shall be removed from the travel lanes. This closure shall comply with TxDOT standards.	15	10	2 Hours	Hourly	
1-1.05	Flexible pavement pot holes or rigid pavement spalls	Manage the Project's pavement and respond with the necessary equipment and personnel to provide a temporary mitigation to any potholes or spalls that would potentially cause a safety hazard to the traveling public.	15	10	1 Hour	Hourly	
1-1.06	Flooding of travel lane	The travel lane is free from water to the extent that such water would represent a hazard by virtue of a lane having standing water that exceeds the criteria listed in <u>Section 12</u> of the Technical Provisions that would potentially cause a safety hazard to the traveling public.	15	10	30 Min	Hourly	
1-1.07	Guardrail	Maintain the Project's guardrail sections and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged guardrail that would potentially cause a safety hazard to the traveling public.	10	5	2 Hours	Hourly	
1-1.08	Attenuators	Maintain the Project's attenuator systems and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged attenuator that would potentially cause a safety hazard to the traveling public.	10	5	2 Hours	Hourly	

Breach of Failure to Meet the Following	Number of Noncompliance Points		Cure Period	Interval of
Minimum Performance Requirements:	Mainlanes	All Other Lanes		Recurrence
Maintain the Project's single and multi-post signs systems and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down signs that would potentially cause a safety hazard to the traveling public.	10	5	2 Hours	Hourly
Maintain the Project's highway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially	10	5	1 Hour	Hourly
Maintain the Project's barrier wall sections and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.	10	5	1 Hour	Hourly
cause a safety hazard to the traveling public.	20	15	1 Hour	Hourly
Instances of failures do not exceed the failure criteria set forth in the Authority's Pavement Management Rating System, including base failures, punch-outs and jointed concrete pavement failures.	20	15	24 Hours	24 Hours
	Minimum Performance Requirements:Maintain the Project's single and multi-post signs systems and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down signs that would potentially cause a safety hazard to the traveling public.Maintain the Project's highway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.Maintain the Project's barrier wall sections and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall sections and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.Maintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.Maintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged bridge/structure that would potentially cause a safety hazard to the traveling public.Instances of failures do not exceed the failure criteria set forth in the Authority's Pavement Management Rating System, including base failures, punch-outs and jointed concrete pavement	Breach of Failure to Meet the Following Minimum Performance Requirements:Noncomp PointMaintain the Project's single and multi-post signs systems and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down signs that would potentially cause a safety hazard to the traveling public.10Maintain the Project's highway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.10Maintain the Project's bighway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.10Maintain the Project's barrier wall sections and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.10Maintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.20Maintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged bridge/structure that would potentially cause a safety hazard to the traveling public.20Instances of failures do not exceed the failure criteria set forth in the Authority's Pavement Management Rating System, including base failures, punch-outs and jointed concrete pavement <td< td=""><td>Breach of Failure to Meet the Following Minimum Performance Requirements:Noncompliance PointsMaintain the Project's single and multi-post signs systems and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down signs that would potentially cause a safety hazard to the traveling public.105Maintain the Project's highway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.105Maintain the Project's bighway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.105Maintain the Project's barrier wall sections and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.105Maintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.2015Maintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged bridge/structure that would potentially cause a safety hazard to the traveling public.2015Instances of failures do not exceed the failure criteria set forth in the Authority's Pavement Management Rating System, includin</td><td>Breach of Failure to Meet the Following Minimum Performance Requirements:Noncompliance PointsCure PeriodMaintain the Project's single and multi-post signs systems and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down signs that would potentially cause a safety hazard to the traveling public.1052 HoursMaintain the Project's highway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.1051 HourMaintain the Project's bighway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.1051 HourMaintain the Project's barrier wall sections and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.1051 HourMaintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged bridge/structure that would potentially cause a safety hazard to the traveling public.20151 Hour</td></td<>	Breach of Failure to Meet the Following Minimum Performance Requirements:Noncompliance PointsMaintain the Project's single and multi-post signs systems and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down signs that would potentially cause a safety hazard to the traveling public.105Maintain the Project's highway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.105Maintain the Project's bighway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.105Maintain the Project's barrier wall sections and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.105Maintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.2015Maintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged bridge/structure that would potentially cause a safety hazard to the traveling public.2015Instances of failures do not exceed the failure criteria set forth in the Authority's Pavement Management Rating System, includin	Breach of Failure to Meet the Following Minimum Performance Requirements:Noncompliance PointsCure PeriodMaintain the Project's single and multi-post signs systems and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down signs that would potentially cause a safety hazard to the traveling public.1052 HoursMaintain the Project's highway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.1051 HourMaintain the Project's bighway lighting system and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged or down light poles that would potentially cause a safety hazard to the traveling public.1051 HourMaintain the Project's barrier wall sections and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged barrier wall section that would potentially cause a safety hazard to the traveling public.1051 HourMaintain the Project's bridges/structures and respond with the necessary equipment and personnel to provide a temporary mitigation to any damaged bridge/structure that would potentially cause a safety hazard to the traveling public.20151 Hour

Number of Breach of or Failure to Meet the Following **Required Task** Noncompliance Item No. Item **Minimum Performance Requirements Points ASSET CONDITION SCORE** Maintain the Project to If 0.1% points to 2.0% points below the established the established overall 4 overall Baseline Condition Score, then: **Baseline Condition** Score in any quarterly If more than 2.0% points to 4% points below the Audit Inspection, as 6 established overall Baseline Condition Score, then: described in Tables 2 and 3 of Exhibit 2 of If more than 4.0% points below the established the COMA. 8 overall Baseline Condition Score, then: Maintain the Project to

II. TABLE 1-2: NONCOMPLIANCE EVENTS

		the established Baseline Condition Score for any component groupings:	If 0.1% to 2.0% points below the established Component grouping Baseline Condition Score, then:	4	60 Days	30 Days
1-2.01	Asset Condition Score	concrete pavement, asphalt pavement, traffic operations, roadside, and bridges	If more than 2.0% points to 4.0% points below the established Component grouping Baseline Condition Score, then:	6	30 Days	7 Days
		in any quarterly audit as described in Tables 2 and 3 <u>, of Exhibit 2</u> of the COMA.	If more than 4.0% points below the established Component grouping Baseline Condition Score, then:	8	30 Days	7 Days
		Maintain the Project to the established Baseline Condition Score for any individual Maintenance Element in any quarterly audit as described in Tables 2 and 3, <u>Exhibit 2</u> of	If 0.1% points to 2% points below any individual Maintenance Element Baseline Condition Score, then:	4	60 Days	30 Days

Interval of

Recurrenc

е

30 Days

15 Days

7 Days

Cure

Period

60 Days

60 Days

30 Days

		the COMA.	If more than 2.0% points to 4.0% points below the established Component grouping Baseline Condition Score, then:	6	30 Days	7 Days
			If more than 4.0% points below the established Component grouping Baseline Condition Score, then:	8	30 Days	7 Days
MAINTENA	NCE ELEMENT	CATEGORY - ROADWAY	(
1_202		Inspection of the	Conduct a visual inspection of the affected area.	2	24 Hours	24 Hours
	Pavement - damaged	novement offer major	Provide written recommendation for remedial work to TxDOT within 10 days after the inspection of the affected area.	2	10 Days	24 Hours
	incident/event.	Complete repairs set forth in the written recommendation for the remedial work.	2	30 Days	7 Days	
1-2.03 Pavement - condition score		All roadways to have a smooth surface course (including bridge decks, covers, gratings, frames and boxes) with adequate skid resistance and free from Defects. Measurements shall be conducted using procedures, techniques, and measuring equipment	Pavement condition score for 80% of Auditable Sections cannot fall below: a) Mainlanes and ramps : Condition Rating Score (CRS) = 7.5 b) Frontage roads – CRS = 6.8	6	30 Days	7 Days
		Consistent with the Authority's Pavement Management Rating System. Measurements and inspections necessary to derive Pavement Condition Score.	Pavement condition score for each Auditable Section cannot fall below: a) Mainlanes and ramps – CRS = 6.8 b) Frontage roads – CRS = 6.6	6	30 Days	7 Days

1-2.04	Pavement - ruts	All pavement sections to be measured using an automated device in compliance with TxDOT standards.	 Ruts – Mainlanes, shoulders, frontage roads & ramps: a) Mainlanes, shoulders and ramps – No more than 3% of wheel path length in each Auditable Section has ruts greater than ¼" in depth b) Frontage roads – No more than 10% of wheel path length in each Auditable Section has ruts greater than ¼" in depth c) No location has a rut greater than 0.5" in depth using the 10ft straight edge used to measure rut depth for localized areas. 	6	30 Days	7 Days
		All pavement sections to be measured using the International Roughness Index (IRI) according to TxDOT standard Tex-1001-S, Operating Inertial Profilers and Evaluating Pavement	 Ride Quality - For 80% of all Auditable Sections measured, IRI throughout 98% of each Auditable Section is less than or equal to: a) Mainlanes – 95" per mile** b) Frontage roads – 120" per mile** c) Ramps and cross streets - 3/16" in. variance between any two contacts on a 10-ft straight edge 	6	30 Days	7 Days
1-2.05	Pavement - ride quality	Profiles for mainlanes, frontage roads and ramps (TxDOT Standard Specification Item 585 - Surface Test Type B) and 10-ft straightedge for ramps and cross streets (TxDOT Standard Specification Item 585 - Surface Test Type A).	 Ride Quality - For each Auditable Section measured, IRI measured throughout 98% of Auditable Section of less than or equal to: a) Mainlanes – 120" per mile** b) Frontage roads – 150" per mile** c) Mainlanes, 0.1 mile average – 150" per mile d) Frontage roads, 0.1 mile average – 180" per mile e) Ramps and cross streets - 1/8" in. variance between any two contacts on a 10-ft straight edge f) No individual discontinuities greater than 0.75" 	6	30 Days	7 Days

		**To allow for measurement bias, an adjustment of -10 (minus ten) is made to IRI measurements for concrete pavements before assessing threshold compliance. Renewal Work and new construction subject to construction quality standards.	Ride Quality - For each Auditable Section measured, IRI measured throughout 98% of each lane containing a a) bridge deck in any Auditable Section, 0.1 mile average – 200" per mile	6	30 Days	7 Days
1-2.06	Pavement – failures	Maintain the pavement sections and correct any instances of failures.	Pavement is maintained to ensure it is functioning as intended, has no standing water that remains on the pavement eight hours after a rain event, and in the case of a pavement failure, repairs/mitigation are performed on pavement failures that exceed the failure criteria set forth in the Authority's Pavement Management Rating System, including potholes, base failures, punch-outs and jointed concrete pavement failures.	8	28 Days	10 Days
1-2.07	Pavement – edge drop- offs	Maintain the pavement section for edge drop-offs	Physical measurement of edge drop-off level compared to adjacent surface does not exceed an edge drop-off greater than 2".	8	10 Days	24 Hours
	Pavement –	All pavement sections to be measured using ASTM E274/E274M-11 Standard Test Method	Mainlanes, shoulders and ramps – For all 0.5 mile sections with an average Skid Number below 30, investigate the potential risk of skidding accidents and take appropriate remedial action, .	8	7 Days	24 Hours
1-2.08	skid resistance	for skid resistance testing of paved surfaces at 50 MPH using a full scale	Frontage roads – For all 0.5 mile sections with an average Skid Number below 30, investigate the potential risk of skidding accidents and take appropriate remedial action.	6	7 Days	24 Hours

		smooth tire meeting the requirements of ASTM E524-08.	When the Skid Number is below 25 and/or when required by the Wet Weather Accident Reduction Program, the Authority Maintenance Contractor shall perform a site investigation and perform required corrective action.	8	7 Days	24 Hours
			Take remedial action in instances where road Users warned of potential skidding hazard.	8	7 Days	24 Hours
1-2.09	Crossovers and other paved areas	Maintain all crossovers and other paved areas free of Defects	a) No Potholes of low severity or higherb) Base failures of low severity or higher	6	28 Days	10 Days
1-2.10	Joints in concrete	Maintain all joints in concrete paving so they are sealed and watertight.	All unsealed joints greater than ¼" are sealed.	6	30 Days	7 Days
		Longitudinal joint separation.	Measurement of joint width is no more than 1" and faulting no more than 1⁄4".	6	30 Days	7 Days
1-2.11	Curbs	Maintain all curbs free of Defects.	Curbs do not have any length out of alignment greater than 1".	6	30 Days	7 Days
MAINTENA		CATEGORY – DRAINAGI				
1-2.12	Pipes and channels	Maintain each Maintenance Element of the drainage system.	Each Maintenance Element of the drainage system is maintained in its proper function by cleaning, clearing and/or emptying as appropriate from the point at which water drains from the travel way to the outfall or drainage way. Pipes and channels shall not have more than 10% of cross section area obstructed.	4	30 Days	7 Days
1-2.13	Drainage treatment devices	Maintain all drainage treatment and balancing systems, flow and spillage control devices.	Drainage treatment and balancing systems, flow and spillage control devices function correctly and their location and means of operation are recorded adequately to permit their correct operation in Emergency. Ensure they are functioning correctly with means of operation displayed.	4	10 Days	5 Days

1-2.14 MAINTENAN	Discharge systems	Maintain surface water discharge systems. CATEGORY – STRUCTU	Surface water discharge systems perform their proper function and discharge to groundwater and waterways complies with the relevant Laws and Governmental Approvals.	4	30 Days	7 Days
	Structures - having an opening measured along the center of the roadway of more than 20 feet Maintain all structures in accordance with the requirements of Federal National Bridge Inspection Standards (NBIS) of the Code of Federal Regulations, 23 Highways – Part 650, the TxDOT Bridge Inspection Manual, and the Federal Highway	Maintain and update all records as required in the TxDOT Bridge Inspection Manual	4	10 Days	5 Days	
1-2.15		No occurrences of condition rating below seven for any deck, superstructure or substructure	8	30 Days	10 Days	
1-2.16 structure structure structure structure	Other structural component;	Administration's Bridge Inspector's Reference Manual. This	All expansion joints and deck drainage systems are free of dirt debris and vegetation, defects, loose nuts and bolts, defects in gaskets	4	30 Days	10 Days
	all non- structural items	- inspection to be	Parapets are free of loose nuts or bolts, blockages of hollow section drain holes, accident damage, graffiti and vegetation.	4	30 Days	10 Days

		the inspections to be provided to the Maintenance Contractor.	Bearings and bearing shelves are clean.	4	30 Days	10 Days
1-2.17	Substructur es and super- structures	Maintain all structures in accordance with the requirements of federal National Bridge Inspection Standards (NBIS) of the Code of Federal Regulations, 23 Highways – Part 650, the TxDOT Bridge Inspection Manual, and the Federal Highway Administration's Bridge Inspector's Reference Manual.	Substructures and superstructures are free of: graffiti, undesirable vegetation, debris and bird droppings, blocked drains, weep pipes, manholes and chambers, blocked drainage holes in structural components, defects in joint sealants, defects in pedestrian protection measures, scour damage, corrosion of rebar, paint system failures, and impact damage	4	30 Days	10 Days
	Non bridge	Maintain all non-	No vegetation or debris, and no more than 20% silt	4	30 Days	10 Days
1-2.18	Non-bridge class	bridge-class culverts.	No defects in sealant to movement joints	6	15 Days	10 Days
	culverts		No scour damage	8	30 Days	10 Days
1-2.19	Gantries	Maintain sign / signal gantries	 a) No loose nuts and bolts b) No defects in surface protection systems including painted or galvanized surfaces 	6	30 Days	10 Days

	Item	Required Task			Cure Period	Interval of Recurrenc e
1-2.20	Load ratings	Perform load rating calculations in accordance with the TxDOT Bridge Inspection Manual. Load restriction requirements as per the TxDOT Bridge Inspection Manual.	All structures maintain the design load capacity.	6	30 Days	10 Days
1-2.21	Access points	Maintain all structures access points	All hatches and points of access have fully operational and lockable entryways and no hatch or point of access is left open or unlocked.	4	30 Days	10 Days
1-2.22	Mechanicall y stabilized	Perform inspection and assessment using Good Industry Practices of all	Mechanically stabilized earth and retaining walls are 95% free of blocked weep holes, undesirable vegetation, defects in joint sealants, defects in pedestrian protection, scour damage, corrosion of reinforcing bars, paint system failure, concrete spalls and impact damage	4	30 Days	10 Days
	retaining walls	retaining mechanically stabilized	Parapets are free of loose nuts and bolts, blockage of drain holes, undesirable vegetation, impact damage and concrete spalls	4	30 Days	10 Days
MAINTENA	NCE ELEMENT	CATEGORY - PAVEMEN	T MARKINGS, OBJECT MARKERS, BARRIER MARKE	ERS AND DELINEAT	ORS	
1-2.23	Pavement markings	Maintain pavement markings and perform annual Mobile Retroreflectivity Data Collection (MRDC) in accordance with	Pavement markings shall be clean and visible during the day and at night, whole and complete and of the correct color, type, width and length and are placed to meet the TMUTCD and TxDOT's pavement marking standard sheets. Pavement markings: a) Meet the minimum retroreflectivity 175	4	60 Days	30 Days
		TxDOT's Special Specification 8094 Mobile Retroreflectivity Data Collection for Pavement Markings.	 mcd/sqm/lx for white b) Meet the minimum retroreflectivity 125 mcd/sqm/lx for yellow c) Do not account more than 5% loss of area of material at any point 			

	Item	Required Task			Cure Period	Interval of Recurrenc e
			 d) Do not account for spread more than 10% of specified dimensions. e) Perform their intended function and comply with relevant regulations 			
1-2.24	Raised pavement markers	Maintain raised reflective pavement markers.	 Pavement markers shall be clean and clearly visible, of the correct color and type, reflective or retroreflective as TxDOT standard, correctly located, aligned and at the correct level, firmly fixed and in a condition that will ensure that they remain at the correct level. Additionally : a) No more than 10 consecutive markers are ineffective (Ineffective includes missing, damaged, settled or sunk); b) A minimum of four markers are visible at 80' spacing when viewed under low beam headlights; and c) They are uniform (replacement rpms having equivalent physical and performance characteristics to adjacent markers) 	4	30 days	15 Days
1-2.25	Delineators and markers	Maintain object markers, mail box markers and delineators.	95% of the delineators and markers are free from Defects, are clean and visible, are of the correct color and type, and are legible, reflective, straight and vertical.	2	30 days	15 Days
MAINTENA	NCE ELEMENT	CATEGORY – GUARDR	AILS, SAFETY BARRIERS AND IMPACT ATTENUATOR	RS		
1-2.26	Guardrail/ safety barriers, concrete barriers (temporary or permanent)	Maintain the Project's guardrail, safety barriers, and concrete barriers sections and repair any damaged guardrail/safety barriers and concrete barrier.	All guardrails, safety barriers, concrete barriers (temporary or permanent) are free of Defects that would potentially cause a safety hazard to the traveling public. They are appropriately placed and correctly installed at the correct height and distance from roadway or obstacles. Installation and repairs are carried out in accordance with the requirements of NCHRP 350 standards.	4	7 Days	24 Hours

1-2.27	Attenuator	Maintain the Project's attenuators.	All impact attenuators are appropriately placed, correctly installed and free of damage.	4	7 Days	24 Hours
MAINTENA	NCE ELEMENT	CATEGORY - TRAFFIC	SIGNS		1	
1-2.28	Traffic signs	Maintain signs at acceptable level of safety for the traveling public.	 a) Retroreflectivity coefficient is not below the requirements of TxDOT's TMUTCD. b) Face damage does not exceed 5% of surface area. c) Placement of signs is in accordance with TxDOT's Sign Crew Field Book and shall not be twisted or leaning. d) Sign Information is of the correct size, location, type and wording to meet its intended purpose and any statutory requirements. e) "Stop," "Yield," "Do Not Enter," "One Way" and "Wrong Way" signs are undamaged. f) Signs are clean, correctly located, clearly visible, legible, reflective, at the correct height and free from structural and electrical Defects. g) Identification markers are provided, correctly located, visible, clean and legible. h) Sign mounting posts are vertical, structurally sound and rust free. i) All break-away sign mounts are clear of silt or other debris that could impede break-away features and shall have correct stub heights. j) Obsolete and redundant signs, per TMUTCD implementation requirements, are removed or replaced as appropriate. k) Visibility distances meet the stated requirements. l) All structures and elements of the signing system are kept clean and free from debris and have clear access provided. 	4 (For each sign not meeting one or more criteria)	30 Days	5 Days

		Perform a bi-annual inspection of all signs on the Project and submit inspection reports to TxDOT.	 m) All replacement and repair materials and equipment are in accordance with the requirements of the TMUTCD. Complete a daytime and nighttime inspection of all the signs on the Project on a bi-annual basis. Complete repairs identified in the inspection report. a) Retroreflectivity coefficient is not below the 	2	30 Days 30 Days	7 Days 5 Days
1-2.28	Large Guide Signs	Maintain signs at acceptable level of safety for the traveling public.	 requirements of TxDOT's TMUTCD. b) Face damage does not exceed 5% of surface area. c) Placement of signs is in accordance with TxDOT's Sign Crew Field Book. d) Sign Information is of the correct size, location, type and wording to meet its intended purpose and any statutory requirements. e) Identification markers are provided, correctly located, visible, clean and legible. f) Sign mounting posts are vertical, structurally sound and rust free. g) Visibility distances meet the stated requirements. h) All structures and elements of the signing system are kept clean and free from debris and have clear access provided. i) All replacement and repair materials and equipment are in accordance with the requirements of the TMUTCD. 	6 (For each sign not meeting one or more criteria)	6 Months	30 Days
			Signs are clean, correctly located, clearly visible, legible, reflective, at the correct height and free from structural and electrical Defects.	4	30 Days	5 Days

Item No.	ltem	Required Task	Breach of or Failure to Meet the Following Minimum Performance Requirements	Number of Noncompliance Points	Cure Period	Interval of Recurrenc e
MAINTENA		CATEGORY – TRAFFIC	SIGNALS (Not Used)			
MAINTENAN	NCE ELEMENT	CATEGORY – HIGHWAY	LIGHTING		Γ	
		Maintain the highway lighting system.	Replace any light poles damaged or knocked down by traffic accidents or Incidents.	2	14 Days	24 Hours
1-2.29	Highway lighting₁	Perform a monthly inspection to monitor and maintain highway lighting.	 a) Roadway lights - A minimum of ninety percent (90%) of the lights in the highway lighting system are operational and no more than two consecutive lights are out. b) Sign lighting – no sign has more than one bulb not working. c) Complete repairs identified in the monthly inspection d) All lighting is free from Defects and provides uniform lighting quality. e) Lanterns are clean and correctly positioned. f) Lighting units are free from accidental damage or vandalism. g) Columns are upright, correctly founded, and structurally sound. 	2	10 Days	24 Hours
		Maintain the electricity supply, feeder pillars, cabinets, switches and fittings.	Electricity supply, feeder pillars, cabinets, switches and fittings are electrically, mechanically and structurally sound and functioning.	2	10 Days	24 Hours
MAINTENAN	ICE ELEMENT	CATEGORY – FENCE, W	ALLS, AND SOUND ABATEMENT			
1-2.30	Fence, walls and sound abatement	Maintain fence, walls and sound abatement at an acceptable level of safety for the traveling public.	All fence, walls and sound abatement act as designed and serve the purpose for which they were intended.	6	30 Days	15 Days

1-2.31	Access gates	Maintain all access gates locked during periods of no work activity.	All construction access gates are locked at the end of each construction work day. No gates remain open or unlocked.	4	2 Hours	1 Hour
MAINTENA	NCE ELEMENT	CATEGORY - ROADSID				
1-2.32	Mowing	Maintain roadside mowing at an acceptable level of maintenance.	 a) 95% of all grassing in the urban areas has a height of between 5 in. and 18 in. Mowing begins before vegetation reaches the maximum height. b) Spot mowing at intersections, ramps or other areas maintains visibility of appurtenances and sight distance. c) Grass or vegetation does not encroach into or on paved shoulders, travel lanes, sidewalks, islands, riprap, traffic barrier or curbs. d) A full width mowing cycle is completed after the first frost. e) Wildflowers are preserved utilizing the guidelines in the mowing specifications and TxDOT Roadside Vegetation Manual. 	2	24 Hours	24 Hours
1-2.33	Herbicide program	Maintain the Project at an acceptable level of service	A herbicide program is undertaken in accordance with the TxDOT Herbicide Manual to control noxious weeds and to eliminate grass in pavement or concrete	2	14 Days	7 Days
1-2.34	Environment	Monitor wetland and other Environmental Approvals obtained during construction.	Comply with all requirements of Environmental Approvals obtained during construction, including monitoring and reporting requirements.	4	24 Hours	24 Hours
1-2.34	al Compliance	Monitor the Erosion Control and Storm Water Pollution Prevention Plan	Provide and maintain all erosion control features in accordance with the Design Documents and TxDOT standards.	4	24 Hours	24 Hours

Item No.	Item	Required Task	Breach of or Failure to Meet the Following Minimum Performance Requirements	Number of Noncompliance Points	Cure Period	Interval of Recurrenc e
1-2.35	Protected species	Monitor the Project to ensure that named species and habitats are protected.	Compliance with the required task	4	30 Days	30 Days
MAINTENA	NCE ELEMENT	CATEGORY - SWEEPIN	G AND CLEANING		-	_
1-2.36	Litter removal	Keep the Project ROW in a neat condition, remove litter regularly. Pick up large litter items before mowing operations. Dispose of all litter and debris collected at an approved solid waste site	No more than 20 pieces of litter per roadside mile shall be visible when traveling at highway speed	2	5 Days	3 Days
1-2.37	Road & bridge sweeping	Maintain the roadway to prevent the buildup of dirt, ice rock, debris, etc. on roadways and bridges.	 a) Prevent dirt, ice, rock, debris, etc. on roadways and bridges from accumulating greater than 24" wide or 1/2" deep. b) Keep all channels, hard shoulders, gore areas, ramps, intersections, islands and frontage roads swept clean. c) Clear and remove debris from traffic lanes, hard shoulders, verges and central reservations, footways and cycle ways. Remove all sweepings without stockpiling in the right of way and dispose of at approved tip. 	4	5 Days	3 Days
MAINTENA	NCE ELEMENT	CATEGORY - PEDESTR	IAN FEATURES			
1-2.38	Concrete sidewalk and pedestrian curb ramps	Maintain sidewalk, pedestrian curb ramps at acceptable level of safety for the traveling public.	All pedestrian elements act as designed, serve the purpose for which they were intended, and meet the performance requirements set forth in the TxDOT Design Standards and Americans with Disabilities Act (ADA) requirements.	2	30 Days	24 Hours

Item No.	Item	Required Task	Breach of or Failure to Meet the Following Minimum Performance Requirements	Number of Noncompliance Points	Cure Period	Interval of Recurrenc e
MAINTENAI	NCE ELEMENT	CATEGORY - EARTHWO	ORK AND CUTTINGS			
1-2.39	Slope Failure	Repair all slope failures.	All structural or natural failures of the embankment and cut slopes of the Project are repaired	6	60 Days	10 Days
MAINTENA	NCE ELEMENT	CATEGORY – AMENITY	-			
1-2.40	Graffiti	Maintain assets free of graffiti.	Graffiti is removed in a manner and using materials that restore the surface to like appearance of adjoining surfaces.	2	24 Hours	24 Hours
1-2.41	Animals	Monitor the Project for	All dead or injured animals are removed from the pavement.	6	2 Hours	1Hour
1-2.41	Ammais	animals. All dead or injured animals are removed for Project ROW.	All dead or injured animals are removed from the Project ROW.	6	24 Hours	24 Hours
1-2.42	Abandoned vehicles and/or equipment	Notify law enforcement for the removal of vehicles and/or equipment from within the Project	Notify law enforcement of any abandoned vehicles and/or equipment for the removal from the Project ROW.	4	24 Hours	24 Hours
SNOW AND	ICE	T		1	Ι	I
1-2.43	Snow and ice	Use reasonable efforts to maintain travel way free from snow and ice.	 Response time to complete manning and loading of spreading vehicles. a) For forecasted snow and ice events, spreading vehicles are manned and loaded prior to a designated activation time. b) For unexpected snow and ice events, spreading vehicles are manned and loaded within 1 Hour 	6	1 Hour	30 Min

			 Response time for snow and ice clearance vehicles to depart from base. a) For forecasted snow and ice events, manned and loaded vehicles are dispatched on or before occurrence of the event. b) For unexpected snow and ice events, manned and loaded vehicles are dispatched within 1 Hour after inception of the event. 	6	1 Hour	30 Min
1-2.44	Weather forecasting	Weather forecast information is obtained and assessed and appropriate precautionary treatment is carried out to minimize ice forming on the travel way.	Comply with Maintenance Management Plan (MMP) to prevent ice forming on the travel way.	6	1 Hour	30 Min
1-2.45	Operational plans	Implement snow and ice clearance operating plans to maintain traffic flows during and after snowfall and restore the travel way to a clear condition as soon as possible.	Comply with MMP for snow and ice clearance plans to maintain traffic flows during and after snowfall and restore the travel way to a clear condition as soon as possible.	2	1 Hour	1 Hour
INCIDENT	RESPONSE					
1-2.46	Incident response	Monitor the Project and respond to Incidents in accordance with the MMP.	 Comply with the MMP for the following: a) Response times met for 98% of Incidents measured on a 1 year rolling basis. b) Complaints from Emergency Services promptly resolved to TxDOT's satisfaction. 	10	0	0
1-2.47	Incidents involving Hazardous Materials	Monitor the Project and respond to Incidents involving Hazardous Materials.	Comply with the requirements of the MMP and the Hazardous Materials Management Plan.	8	1 Hour	1 Hour

Item No.	ltem	Required Task	Breach of or Failure to Meet the Following Minimum Performance Requirements	Number of Noncompliance Points	Cure Period	Interval of Recurrenc e		
Note:								
1. Mair	1. Maintenance Contractor shall not be responsible for the Non-Maintained Elements.							

III. TABLE 1-3: PLANNING AND REPORTING BASED NONCOMPLIANCE EVENTS

Item No.	ltem	Breach of or Failure to Meet the Following Minimum Performance Requirements:	Number of Noncompliance Points	Cure Period	Interval of Recurrence
1-3.01	Reporting	Submit all reports relating to the Maintenance Services, including the annual reports, in the required format, with the content and within the time period required under the COMA Documents.	2	10 Days	5 Days
1-3.02	Reporting	Report to TxDOT on a daily basis any Lane Closures or reduced widths which give rise to Lane Rental Fees.	4	2 Days	1 Day
1-3.03	Reporting	Keep record of and report to TxDOT a Noncompliance Event as and when required under Section 19.2.1.1 and 19.2.1.3 of the Agreement.	10	10 Days	5 Days
1-3.04	Reporting	Provide information updates to the Maintenance Management Plan in accordance with Section 0120 of Exhibit 2 of the COMA.	2	10 Days	5 Days
1-3.05	Plan – Incident Management	Prepare and submit an Incident Management Plan and updates in accordance with Section 0140 of Exhibit 2 of the COMA.	2	10 Days	5 Days
1-3.06	Reporting	Implement the MMS and update the information on the MMS in accordance with Section 0160 of Exhibit 2 to the COMA	2	10 Days	5 Days
1-3.07	Plan - Safety	Prepare and submit a Maintenance Safety Plan and updates in accordance with Section 0180 of Exhibit 2 of the COMA.	4	3 Days	2 Days
1-3.08	Plan - Quality control	Prepare and submit a Maintenance Services Quality Control Plan and updates in accordance with Section 0170 of Exhibit 2 of the COMA.	2	10 Days	5 Days
1-3.09	Plan – Document Management	Prepare and submit a Maintenance Document Management Plan and updates in accordance with Section 0210 of Exhibit 2 of the COMA.	2	10 Days	5 Days

1-3.10	Plan – Deliverables Schedule	Prepare and submit a Maintenance Services Deliverables Schedule and updates in accordance with Section 0220 of Exhibit 2 of the COMA.	2	10 Days	5 Days
1-3.11	Plan - Traffic management	Prepare and submit to TxDOT for its approval a Traffic Management Plan and updates in accordance with Section 1120 of Exhibit 2 of the COMA.	10	5 Days	5 Days
1-3.12	Plans - Traffic control	Prepare and submit a traffic control plan to TxDOT 10 days before a planned maintenance activity involving a Lane Closure or revision to current traffic control.	6	1 Day	1 Day
1-3.13	Plan - Renewal and replacement	Prepare and submit to TxDOT for review and comment a Renewal Work Submittal and updates in accordance with Section 3.3.2 of the COMA and Section 0150 of Exhibit 2 of the COMA.	2	14 Days	7 Days