Texas Department of Transportation

TECHNICAL PROVISIONS

FOR

TXDOT SH 288 TOLL LANES PROJECT IN HARRIS COUNTY

ATTACHMENT 19-1 PERFORMANCE AND MEASUREMENT TABLE BASELINE

April 7, 2014

ELEMENT			PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD		INSPECTION AI MEASUREMENT MI
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair	(AFTER SERVICE COMMENCEMENT)*	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERAT COMMENCEMENT I SERVICE COMMEN
1) ROADWAY										
							Unless stated otherwise, measurements shall be conducted using procedures, techniques, and measuring equipment consistent with TxDOT's Pavement Management Information System Rater's Manual. Unless otherwise stated, pavement performance measurement records relate to 0.5- mile sections as described in the Pavement Management Information System Rater's Manual.			Unless stated otherwise, measurements shall be co using procedures, techniq measuring equipment con with TxDOT's Pavement Management Information Rater's Manual. Unless stated, pavement perform measurement records rela mile sections as described Pavement Management I System Rater's Manual.
	1.1	Obstructions and debris	Roadway and clear zone free from obstructions and debris	2 hrs	N/A	N/A	Visual Inspection	Number of obstructions and debris	Nil	Visual Inspection
	1.2	Pavement	All roadways have a smooth and quiet surface course (including bridge decks, covers, gratings, frames and boxes) with adequate skid resistance and free from Defects.	24 hrs	28 days	6 months	 a) Pavement Condition Score Measurements and inspections necessary to derive Pavement Condition Score b) Ruts – Mainlanes, shoulders & nome Depth as measured using an 	 Pavement Condition Score for 80% of Auditable Sections exceeding: Mainlanes and ramps - 90 Frontage roads - 80 Pavement Condition Score for 80% of Auditable Sections exceeding: Mainlanes and ramps - 80 Frontage roads - 70 Percentage of wheel path length with site groater than 16" in 	100% 100% 100% 100%	Pavement Condition Score be measured for this phase Visual inspection at travel
							ramps Depth as measured using an automated device in compliance with TxDOT Standards.	 with ruts greater than 1/4" in depth in each Auditable Section Mainlanes, shoulders and ramps - 3% Frontage roads - 10% 	Nil Nil	
							10ft straight edge used to measure rut depth for localized areas.	Depth of rut at any location greater than 0.5"	Nil	10ft straight edge used to r depth for localized areas.
							c) Ride quality Measurement of International Roughness Index (IRI) according to TxDOT standard Tex- 1001-S, Operating Inertial Profilers and Evaluating Pavement Profiles	For 80% of all Auditable Sections Measured, IRI throughout 98% of each Auditable Section is less than or equal to:		Ride quality will not be me during this phase.
								 Mainlanes, ramps - 95" per mile** Frontage roads - 120" per mile** 	100% 100%	

AND METHOD ATING F DATE TO ENCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
e, conducted niques, and consistent int so System ss otherwise rmance relate to 0.5- bed in the th Information l.		
	Number of obstructions and debris	Nil
ore will not ase.		N/A N/A
vel speed		
		N/A
to measure rut	Depth of rut at any location	N/A
ls.	greater than 0.5"	Nil
e measured		N/A N/A

Performance	and Me	easurement Tab	le Baseline					1			1	
ELEMENT	REF	ELEMENT	PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE	TARGET
CATEGORY	KET		REQUIREMENT	Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair	(AFTER SERVICE COMMENCEMENT)*	COMMENCEMENT*	TARGET	COMMENCEMENT DATE TO SERVICE COMMENCMENT)	TO SERVICE COMMENCEMENT)	
	1.2 Cont.						** To allow for measurement bias, an adjustment of -10 (minus ten) is made to IRI measurements for concrete pavements before assessing threshold compliance.	IRI measured throughout 98% of Auditable Section of less than or equal to:				
								• Mainlanes, ramps - 120" per mile**	100%			N/A
								• Frontage roads - 150" per mile**	100%		• Frontage roads - 150" per mile**	N/A
							(Renewal Work and new construction subject to construction quality standards)	Mainlanes, ramps, 0.1 mile average - 150" per mile**	100%	(Renewal Work and new construction subject to construction quality standards)	Mainlanes, ramps, 0.1 mile average - 150" per mile**	N/A
								Frontage roads, 0.1 mile average - 180" per mile**	100%		Frontage roads, 0.1 mile average - 180" per mile**	N/A
								IRI measured throughout 98% of each lane containing a bridge deck in any Auditable Section, 0.1 mile average - 200" per mile**	100%		IRI measured throughout 98% of each lane containing a bridge deck in any Auditable Section, 0.1 mile average - 200" per mile**	N/A
							10-ft straightedge used to measure discontinuities	Individual discontinuities greater than 1/4"	Nil	10-ft straightedge used to measure discontinuities	Individual discontinuities greater than 1/4"	Nil
							d) Failures Instances of failures exceeding the failure criteria set forth in the TxDOT PMIS Rater's Manual, including potholes, base failures, punchouts and jointed concrete pavement failures	Occurance of any failure	Nil	d) Failures Instances of failures exceeding the failure criteria set forth in the TxDOT PMIS Rater's Manual, including potholes, base failures, punchouts and jointed concrete pavement failures	Occurrence of any failure	Nil
							e) Edge drop-offs Physical measurement of edge drop-off level compared to adjacent surface	Instances of edge drop-off greater than 2"	Nil	e) Edge drop-offs Visual inspection of edge drop-off level compared to adjacent surface	Instances of edge drop-off greater than 2"	Nil
							f) Skid resistance ASTM E274/E274M-11 Standard Test Method for Skid Resistance Testing of Paved Surfaces at 50 MPH using a full scale smooth tire meeting the requirements of ASTM E 524	• Mainlanes, shoulders, and ramps - Number of sections investigated as to potential risk of skidding accident and appropriate remedial action taken where average Skid Number for 0.5-mile section of mainlanes, shoulders and ramps is below 25.	Nil	f) Skid resistance ASTM E274/E274M-11 Standard Test Method for Skid Resistance Testing of Paved Surfaces at 50 MPH using a full scale smooth tire meeting the requirements of ASTM E 524.	• Mainlanes, shoulders and ramps – Number of sections investigated as to potential risk of skidding accident and appropriate remedial action taken where average Skid Number for 0.5-mile section of mainlanes, shoulders and ramps is below 25.	Nil
								• Frontage roads - Number of sections investigated as to potential risk of skidding accident and appropriate remedial action taken where average Skid Number for 0.5- mile section of frontage roads is below 25	Nil		• Frontage roads –Number of sections investigated as to potential risk of skidding accident and appropriate remedial action taken where average Skid Number for 0.5- mile section of frontage roads is below 25.	Nil

ELEMENT	REF	ELEMENT	PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE	TARGET
CATEGORY	KLF	ELEWIENI	REQUIREMENT	Cat 1 Hazard	Cat 1 Permanent	Cat 2 Permanent	(AFTER SERVICE COMMENCEMENT)*	COMMENCEMENT*	TARGET	COMMENCEMENT DATE TO SERVICE COMMENCMENT)	TO SERVICE COMMENCEMENT)	
	1.2 Cont.			Mitigation	Remedy	Repair		• When the Skid Number is below 25 and/or when required by the Wet Weather Accident Reduction Program, areas categorized as high risk, the Concessionaire shall perform a site investigation and perform required corrective action.	100%		• When the Skid Number is below 25 and/or when required by the Wet Weather Accident Reduction Program, areas categorized as high risk, the Concessionaire shall perform a site investigation and perform required corrective action.	100%
			Road users warned of potential skidding hazards	24hrs	7days	N/A	Skid resistance (as above)	Instances where road users warned of potential skidding hazard where remedial action is identified.	100%	Skid resistance (as above)	Instances where road users warned of potential skidding hazard where remedial action is identified.	100%
	1.3	Crossovers and other paved areas	Crossovers and other paved areas are free of Defects	24 hrs	28 days	6 months	a) Potholes	Potholes of low severity or higher	Nil	a) Potholes	Potholes of low severity or higher	Nil
							b) Base failures	Base failures of low severity or higher	Nil	b) Base failures	Base failures of low severity or higher	Nil
	1.4	Joints in concrete	Joints in concrete paving are sealed and watertight	24 hrs	28 days	6 months	Visual inspection of joints	Length unsealed joints greater than ¹ / ₄ "	Nil	Visual inspection of joints	Length unsealed joints greater than ¹ / ₄ "	Nil
			Longitudinal joint separation				Measurement of joint width and level difference of two sides of joints	Joint width more than 1" or faulting more than 1/4"	Nil	Measurement of joint width and level difference of two sides of joints	Joint width more than 1" or faulting more than 1/4"	Nil
	1.5	Curbs	Curbs are free of defects	24 hrs	28 days	6 months	Visual inspection	Length out of alignment	Nil	Visual inspection	Length out of alignment	Nil
- Items in the	se columns	s shall be reviewe	ed annually by Developer as part o	f the MMP to c	omply with Te	chnical Docume	ents and/or Good Industry Practice.					
DRAINAGE	2.1	Culverts, Pipes and Channels	Each 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.	24 hrs	28 days	6 months	Visual inspection supplemented by CCTV where required to inspect buried pipe work	Length with less than 90% of cross-sectional area clear (feet)	Nil	Visual inspection following heavy rain	-Identify areas of water back up	Nil
	2.2	Drainage treatment devices	Drainage treatment and balancing systems, flow and spillage control devices function correctly and their location and means of operation is recorded adequately to permit their correct operation in Emergency.	24 hrs	28 days	6 months	Visual inspection	Devices functioning correctly with means of operation displayed	100%	Visual inspection	Devices functioning correctly with means of operation displayed	100%
	2.3	Travel Way	The travel way is free from water to the extent that such water would represent a hazard by virtue of its position and depth.	24 hrs	28 days	6 months	Visual inspection of water on surface	Instances of hazardous water build-up	Nil	Visual inspection of water on surface	Instances of hazardous water build-up	Nil

Performance	e and Mo	easurement T	able Baseline							
ELEMENT	DEE		PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD	TADOFT	INSPECTION A MEASUREMENT M
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERAT COMMENCEMENT I
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*			SERVICE COMMEN
	2.4	Discharge systems	Surface water discharge systems perform their proper function and discharge to groundwater and waterways complies with the relevant legislation and permits.	24 hrs	28 days	6 months	Visual inspection and records	Non-compliances with legislation	Nil	Visual inspection and reco
	2.5	Protected Species	Named species and habitats are protected.	24 hrs	28 days	6 months	Visual inspection	Compliance with the requirement	100%	Visual inspection
3) STRUCTU	RES									
	3.1	Structures having an opening measured along the center of the roadway of more than 20 feet between undercopings of abutments or springlines of arches or extreme ends of openings or multiple boxes	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 measure • scour damage • corrosion of rebar • paint system failures • impact damage	24 hrs	28 days	6 months	Inspection and assessment 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 Administration's Bridge Inspector's Reference Manual.	Records as required in the TxDOT Bridge Inspection Manual Occurrence of condition rating below six (6) for any deck, super structure or substructure All condition states to be one (1) for all structure components	Nil 100%	Inspection and assessment accordance with the requir federal National Bridge In Standards (NBIS) of the C Federal Regulations, 23 H Part 650, the TxDOT Brid inspection Manual, and the Administration's Bridge In Reference Manual.
* - Items in the	se column	s shall be review	ed annually by Developer as part of	f the MMP to o	comply with Te	chnical Docum	ents and/or Good Industry Practice.			
	3.2	Structure components	i) Expansion joints are free of:dirt debris and vegetation	24 hrs	28 days	6 months	Inspection and assessment 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 Administration's Bridge Inspector's Reference Manual.	Records as required in the TxDOT Bridge Inspection Manual	Nil	Inspection and assessmen accordance with the requi federal National Bridge Ir Standards (NBIS) of the C Federal Regulations, 23 H Part 650, the TxDOT Brid inspection Manual, and th Administration's Bridge I Reference Manual.
			 defects in drainage systems loose nuts and bolts defects in gaskets 					Occurrences of condition rating below six(6) for any deck, superstructure or substructure	1111	
			ii) The deck drainage system is free of all and operates as intended.					All condition states to be one (1) for all structure components	100%	

AND AETHOD TING DATE TO NCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
cords	Non-compliances with legislation	Nil
	Compliance with the requirement	100%
nt in irrements of Inspection Code of Highways – idge he Federal Inspector's	Records as required in the TxDOT Bridge Inspection Manual Occurrence of condition rating below six (6) for any deck, super structure or substructure All condition states to be one (1) for all structure components	Nil 100%
ent in uirements of Inspection Code of Highways – idge the Federal Inspector's	Records as required in the TxDOT Bridge Inspection Manual	
	Occurrences of condition rating below six (6) for any deck, superstructure or substructure	Nil
	All condition states to be one (1) for all structure components	100%

ELEMENT			PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD		INSPECTION MEASUREMENT
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPER COMMENCEMEN'
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*			SERVICE COMME
			iii) Parapets are free of:	guuon	literation	repui	-			
			loose nuts or bolts							
			• blockages of hollow section drain holes							
			• graffiti							
			vegetationaccident damage							
	3.2 Cont		 iv) Bearings and bearing shelves are clean. v) Sliding and roller surfaces are clean and greased to ensure satisfactory performance. Additional advice contained in bearing manufacturers' instructions in the Structure Maintenance Manual is followed. Special finishes are clean and perform to the appropriate standards. vii) All non-structural items such as hoists and electrical fixings, operate correctly, are clean and lubricated as appropriate, in accordance with the manufacturer's recommendations and certification of lifting devices is maintained. 							
	3.3	Non-bridge class culverts	Non-bridge-class culverts are free of: • vegetation and debris and silt	24 hrs	28 days	6 months	Visual inspection	Number with vegetation, debris and silt Number with defects in sealant	Nil Nil	Visual inspection
			• defects in sealant to movement joints					and movement joints		
			scour damage					Number with scour damage	Nil	
	3.4	Gantries and high masts	Sign signal gantries, high masts are structurally sound and free of:	24 hrs	28 days	6 months	Visual inspection	Number with loose assemblies	Nil	Visual inspection
			loose nuts and bolts					Number with defects in surface protection	Nil	
			• defects in surface protection systems					protection	271	
			• graffiti					Number with graffiti	Nil	
	3.5	Load ratings	All structures maintain the design load capacity.	24 hrs	28 days	6 months	Load rating calculations in accordance with the Manual for Bridge Evaluation and the TxDOT Bridge Inspection Manual.	Number of load restrictions for Texas legal loads (including legally permitted vehicles)	Nil	

AND METHOD TING DATE TO NCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
	Number with vegetation, debris and silt	Nil
	Number with defects in sealant and movement joints	Nil
	Number with scour damage	Nil
	Number with loose assemblies	Nil
	Number with defects in surface protection	Nil
	Number with graffiti	Nil
	Number of load restrictions for Texas legal loads (including legally permitted vehicles)	Nil

	e and Me	easurement Ta		RESPON	SE TO DEFE	CTS	INSPECTION AND	MEASUREMENT RECORD		INSPECTION A MEASUREMENT M
ELEMENT CATEGORY	REF	ELEMENT	PERFORMANCE REQUIREMENT	Cat 1	Cat 1	Cat 2	MEASUREMENT METHOD (AFTER SERVICE	(AFTER SERVICE	TARGET	(FROM OPERAT
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*	COMMENCEMENT*		COMMENCEMENT I SERVICE COMMEN
							Load restriction requirements as per the TxDOT Bridge Inspection Manual			
			MARKERS, BARRIER MARK						1	
* - Items in the	se columns 4.1	Shall be reviewe Pavement markings	ed annually by Developer as part of Pavement markings are:	t the MMP to c 24 hrs	28 days	6 months	ents and/or Good Industry Practice. a) Markings - General			a) Markings - General
	d • th a	 clean and visible during the day and at night whole and complete and of the correct color, type, width and length 				General Portable retroreflectometer, which uses 30 meter geometry meeting the requirements described in ASTM E 1710	Length meeting the minimum retroreflectivity 175 med/sqm/lx for white	100%	Visual inspection at 300 ft beams as per earlier TxDC	
			• placed to meet the TMUTCD and TxDOT's Pavement Marking Standard Sheets					Length meeting the minimum retroreflectivity 125 med/sqm/lx for white	100%	
							Physical measurement	Length with more than 5% loss of area of material at any point	Nil	Visual inspection
								Length with spread more than 10% of specified dimensions.	Nil	
							b) Profile Markings Visual inspection	Length performing its intended function and compliant with relevant regulations	100%	b) Profile Markings Visual inspection
	4.2	Raised reflective markers	Raised reflective pavement markers, object markers and delineators are: • clean and clearly visible • of the correct color and type	24 hrs	28 days	6 months	Visual inspection	Number of markers associated with road markings that are ineffective in any 10 consecutive markers. (Ineffective includes missing, damaged, settled or sunk)	Nil	Visual inspection
			 reflective or retroreflective as TxDOT standard correctly located, aligned and at the correct level 					[A minimum of four markers should be visible at 80' spacing when viewed under low beam headlights]	100%	
			 are firmly fixed are in a condition that will ensure that they remain at the correct level. 					Uniformity (replacement rpms having equivalent physical and performance characteristics to adjacent markers).		
	4.3	Delineators & Markers	Object markers, mail box markers and delineators are:	24 hrs	28 days	6 months	Visual inspection	Number of object markers or delineators defective or missing	Nil	Visual inspection
			 clean and visible of the correct color and type legible and reflective Straight and Vertical 							
			_							
5) GUARDRA	ILS, SAFF 5.1	ETY BARRIER Guard rails and safety	S AND IMPACT ATTENUATO All guardrails, safety barriers, concrete barriers, etc.) are	RS 24 hrs	28 days	6 months	Visual inspection	Length of road restraint systems correctly installed	100%	Visual inspection

AND IETHOD FING DATE TO ICMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
t with low	Length found defective.	100%
OT practice.		
		100%
	Length with more than 5% loss of area of material at any point	Nil
	Length with spread more than 10% of specified dimensions.	Nil
	Length performing its intended function and compliant with relevant regulations	100%
	Number of markers associated with road markings that are ineffective in any 10 consecutive markers. (Ineffective includes missing, damaged, settled or sunk)	Nil
	[A minimum of four markers should be visible at 80' spacing when viewed under low beam headlights]	100%
	Uniformity (replacement rpms having equivalent physical and performance characteristics to adjacent markers).	
	Number of object markers or delineators defective or missing	Nil
	-	
	Length of road restraint systems	100%

ELEMENT	DEE		PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD		INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (FROM OPERATING	
ATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1 Hazard	Cat 1 Permanent	Cat 2 Permanent	(AFTER SERVICE COMMENCEMENT)*	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCMENT)	COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGE
	-		They are announistally placed	Mitigation	Remedy	Repair		I anoth fuer from defects	1000/		Longth from from defects	100%
			They are appropriately placed and correctly installed at the					Length free from defects	100%		Length free from defects	
	5.1		correct height and distance from roadway or obstacles.					Length at correct height	100% 100%		Length at correct height	100%
	5.1 Cont.		Installation and repairs shall be carried out in accordance with the requirements of NCHRP 350 standards.					Length at correct distance from roadway and obstacle			Length at correct distance from roadway and obstacle	100%
	5.2	Impact attenuators	All impact attenuators are appropriately placed and correctly installed	24 hrs	7 days	6 months	Visual inspection	Number correctly placed and installed	100%	Visual inspection	Number correctly placed and installed	100%
FRAFFIC S	SIGNS											
	6.1	General - All Signs	i) Signs are clean, correctly located, clearly visible, legible, reflective, at the correct height and free from structural and electrical defects	24 hrs	28 days	6 months	a) Retroreflectivity Coefficient of retro -reflectivity	Number of signs with reflectivity below the requirements of TxDOT's TMUTCD	Nil	Visual inspection at 300 ft with low beams as per earlier TxDOT practice	Number of signs found non- reflective.	Nil
			ii) Identification markers are provided, correctly located, visible, clean and legible				b) Face damage Visual inspection	Number of signs with face damage greater than 5% of area	Nil	b) Face damage Visual inspection	Number of signs with face damage greater than 5% of area	Nil
			iii) Sign mounting posts are vertical, structurally sound and rust free				c) Placement Visual inspection	Signs are placed in accordance with TxDOT's Sign Crew Field Book including not twisted or leaning	100%	No action	Signs are not twisted or leaning	100%
			iv) All break-away sign mounts are clear of silt or other debris that could impede break-away features and shall have correct stub heights									
			 v) Obsolete and redundant signs are removed or replaced as appropriate 				d) Obsolete signs Visual inspection	Number of obsolete signs	Nil	No action	Number of obsolete signs	Nil
			vi) Visibility distances meet the stated requirements vii) Sign information is of the				e) Sign Information Visual inspection		100%	e) Sign Information Visual inspection		100%
			correct size, location, type and wording to meet its intended purpose and any statutory requirements					Sign information is of the correct size, location, type and wording			Sign information is of the correct size, location, type and wording	
			viii) All structures and					to meet its intended purpose			to meet its intended purpose	
			elements of the signing system									
			are kept clean and free from debris and have clear access									
			provided. ix) All replacement and repair									
			materials and equipment are in accordance with the									
			requirements of the TMUTCD									
			x) Dynamic message signs are in an operational condition				f) Dynamic Message Signs Visual	Dynamic message signs are	100%	f) Dynamic Message Signs Visual inspection	Dynamic message signs are fully functioning	100%

ELEMENT	DEE	ELEMENT	PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD	TADOFT	INSPECTION AI MEASUREMENT MI
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair	(AFTER SERVICE COMMENCEMENT)*	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERAT) COMMENCEMENT D SERVICE COMMEN(
				0			inspection	fully functioning		
* - Items in the	se columns	s shall be reviewe	d annually by Developer as part o	f the MMP to c	comply with Te	chnical Docume	ents and/or Good Industry Practice.			
	6.2	General - Safety critical signs	Requirements as 6.1, Plus: "Stop," "Yield," "Do Not Enter," "One Way" and "Wrong Way" signs are clean legible and undamaged.	2hrs	1 week	6 months	Visual inspection	Number of damaged Safety critical signs	Nil	Visual inspection
7) TRAFFIC S	IGNALS		-					-		-
	7.1	General	i) Traffic Signals and their associated equipment are:	2hrs	24 hrs	6 months	a) General condition Visual inspection	Signals are clean and visible	100%	a) General condition Visu inspection
			clean and visible				b) Damage Visual inspection	Signals are undamaged	100%	b) Damage Visual inspect
			• correctly aligned and operational				c) Signal timing Timed measurements	Installations have correct signal timings	100%	c) Signal timing Timed measurements
			• free from damage caused by accident or vandalism				d) Contingency plans Records Review	Full contingency plans are in place	100%	d) Contingency plans Rec Review
			 correctly aligned and operational 							
			ii) Signal timing and operation is correct							
			iii) Contingency plans are in place to rectify Category 1 defects not immediately repairable to assure alternative traffic control is provided during a period of failure							
	7.2	Soundness	Traffic Signals are structurally and electrically sound	24 hrs	28 days	6 months	a) Structural soundness Visual inspection			a) Structural soundness vinspection
							b) Electrical soundness Testing to meet NEC regulations	Inspection records showing safe installation and maintenance	100%	b) Electrical soundness To meet NEC regulations
	7.3	Identification marking	Signals have identification markers and the telephone number for reporting faults are correctly located, clearly visible, clean and legible	N/A	28 days	6 months	Visual inspection	Inspection records showing identification markers and other information are easily readable	100%	Visual inspection
	7.4	Pedestrian Elements and Vehicle Detectors	All pedestrian elements and vehicle detectors are correctly positioned and fully functional at all times	24 hrs	28 days	6 months	Visual inspection	Inspection records showing compliance	100%	Visual inspection
* - Items in the	se columns	s shall be reviewe	d annually by Developer as part o	f the MMP to c	comply with Te	chnical Docume	ents and/or Good Industry Practice.	•		·
8) LIGHTING		Dood	i) All lighting in free from	04 k	L 0C	6 marsh	a) Mainlana Bakta anggabla Mista	1	NT:1	a) Mainlana liakta ana 1
	8.1	Roadway Lighting – General	i) All lighting is free from defects and provides acceptable uniform lighting quality	24 hrs	28 days	6 months	a) Mainlane lights operable Night time inspection or automated logs	Number of sections with less than 90% of lights functioning correctly at all times	Nil	a) Mainlane lights operal time inspection or automat
			ii) Lanterns are clean and correctly positioned				b) Mainlane lights out of action Night time inspection or automated	Instances of more than two consecutive lights out of action	Nil	b) Mainlane lights out of Night time inspection or au

AND IETHOD FING DATE TO ICMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
	Number of damaged Safety critical signs	Nil
sual	Signals are clean and visible	100%
ction	Signals are undamaged	100%
	Installations have correct signal	100%
ecords	timings Full contingency plans are in place	100%
Visual		
Testing to	Inspection records showing safe installation and maintenance	100%
	Inspection records showing identification markers and other information are easily readable	100%
	Inspection records showing compliance	100%
able Night ated logs	Number of sections with less than 90% of lights functioning	Nil
f action automated	correctly at all times Instances of more than two consecutive lights out of action	Nil

ELEMENT			PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD		INSPECTION A MEASUREMENT MI
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1 Cat 1 Cat 2		Cat 2	(AFTER SERVICE	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERAT COMMENCEMENT I
				Hazard Mitigation	Permanent Remedy	Permanent Repair	t COMMENCEMENT)*			SERVICE COMMENC
			iii) Lighting units are free from accidental damage or vandalism				logs			logs
	8.1 Cont.		iv) Columns are upright, correctly founded, visually acceptable and structurally sound							
	8.2	Sign Lighting	Sign lighting is fully operational	24 hrs	28 days	6 months	Night time inspection or automated logs	Instances of more than one bulb per sign not working	Nil	Night time inspection or an logs
	8.3	Electrical Supply	Electricity supply, feeder pillars, cabinets, switches and fittings are electrically, mechanically and structurally sound and functioning	24 hrs	7 days	1 month	Testing to meet NEC regulations, visual inspection	Inspection records showing safe installation and maintenance	100%	Testing to meet NEC regul visual inspection
	8.4	Access Panels	All access panels in place at all times.	24 hrs	7 days	1 month	Visual Inspection	Instances of missing access panels	Nil	Visual Inspection
	8.5	High Mast Lighting	i) All high mast luminaries functioning on each pole	24 hrs	48 hrs	1 month	Yearly inspection and night time inspections or automated logs	Instances of two or more lamps not working per high mast pole	Nil	Yearly inspection and night inspections or automated
			ii) All obstruction lights are present and working (if required)					Identification of other defects	Nil	
			iii) Compartment door is secure with all bolts in place							
			iv) All winch and safety equipment is correctly functioning and maintained without rusting or corrosion							
			(for structural requirements refer to Element Category 3)							
)) FENCES, W	ALLS AN	ND SOUND ABA	ATEMENT							
	9.1	Design and Location	Fences and walls act as designed and serve the purpose for which they were intended	24 hrs	28 days	6 months	Visual Inspection	Inspection records showing compliance	100%	Visual Inspection
	9.2	Construction	Integrity and structural condition of the fence is maintained	24 hrs	28 days	6 months	Structural assessment if visual inspection warrants	Inspection records showing compliance	100%	Structural assessment if vis inspection warrants
10) ROADSID	E MANA	GEMENT	•				•			·
* - Items in the							ents and/or Good Industry Practice.		1	1
	10.1	Vegetated Areas - Except landscaped areas - General	Vegetation is maintained so that: i) Height of grass and weeds is kept within the limits described for urban and rural areas. Mowing begins before vegetation reaches the maximum height.	24 hrs	7 days	28 days	a) Urban areas Physical measurement of height of grass and weeds	Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 18 in	100%	a) Urban areas Visual ins height of grass and weeds

AND IETHOD FING DATE TO ICMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
automated	Instances of more than one bulb per sign not working	Nil
ulations,	Inspection records showing safe installation and maintenance	100%
	Instances of missing access panels	Nil
ght time l logs	Instances of two or more lamps not working per high mast pole	Nil
-	Identification of other defects	Nil
	Inspection records showing compliance	100%
risual	Inspection records showing compliance	100%
nspection of s	Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 18 in	100%

ELEMENT	REF	ELEMENT	PERFORMANCE	RESPON	SE TO DEFE	стѕ	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AND MEASUREMENT METHOD (FROM OPERATING	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE	TARGET
ATEGORY	KEF	ELENIENI	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	COMMENCEMENT*	TARGET	COMMENCEMENT DATE TO	TO SERVICE	TARGET
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*			SERVICE COMMENCMENT)	COMMENCEMENT)	
	10.1 Cont.		ii) Spot mowing at intersections, ramps or other areas maintains visibility of appurtenances and sight distance.				b) Rural areas Physical measurement of height of grass and weeds	Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 30 in	100%	b) Rural areas Physical measurement of height of grass and weeds	Individual measurement areas to have 95% of height of grass and weeds between 5 in. and 30 in	100%
			iii) Grass or vegetation does not encroach into or on paved shoulders, main lanes, sidewalks, islands, riprap, traffic barrier or curbs.				c) Encroachment Visual inspection of instances of encroachment of vegetation	Occurrences of vegetation encroachment in each auditable section	Nil	c) Encroachment Visual inspection of instances of encroachment of vegetation	Occurrences of vegetation encroachment in each auditable section	Nil
			iv) A herbicide program is undertaken in accordance with the TxDOT Herbicide Manual to control noxious weeds and to eliminate grass in pavement or concrete.				d) Wildflowers Visual Inspection with audit of process.	Adherence to vegetation management manuals	100%	d) Wildflowers Visual Inspection with audit of process.	Adherence to vegetation management manuals	100%
			 v) A full width mowing cycle is completed after the first frost. 				e) Sight lines Visual inspection	Instances of impairment of sight lines or sight distance to signs	Nil	e) Sight lines Visual inspection	Instances of impairment of sight lines or sight distance to signs	Nil
	10.2	Landscaped Areas	 i) All landscaped areas are maintained to their originally constructed condition. Landscaped areas are as designated in the plans. 	24 hrs	7 days	28 days	Visual inspection	Inspection records showing compliance	100%	Visual inspection	Inspection records showing compliance	100%
			ii) Mowing, litter pickup, irrigation system maintenance and operation, plant maintenance, pruning, insect, disease and pest control, fertilization, mulching, bed maintenance, watering is undertaken as per FMP.									
			iii) The height of grass andweeds is kept between 2" and8". Mowing begins beforevegetation reaches 8 in									
			iv) Damaged or dead vegetation is replaced.									
	10.3	Fire Hazards	Fire hazards are controlled	24 hrs	7 days	28 days	Visual inspection	Instances of dry brush or vegetation forming fire hazard	Nil	Visual inspection	Instances of dry brush or vegetation forming fire hazard	Nil

ELEMENT	DEE		PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD	TADODT	INSPECTION ANI MEASUREMENT MET
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATIN COMMENCEMENT DA
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*			SERVICE COMMENCE
	10.4	Trees, brush and ornamentals	i) Trees, brush and ornamentals on the right of way, except in established no mow areas, are trimmed in accordance with TxDOT standards.	24 hrs	7 days	28 days	Visual inspection	Inspection records showing compliance	100%	Visual inspection
	10.4 Cont.		ii) Trees, brush and ornamentals are trimmed to insure they do not interfere with vehicles or sight distance, or inhibit the visibility of signs.							
			iii) Dead trees, brush, ornamentals and branches are removed. Potentially dangerous trees or limbs are removed.							
			iv) All undesirable trees and vegetation are removed. Diseased trees or limbs are treated or removed by licensed contractors.							
	10.5	Wetlands	Wetlands are managed in accordance with the permit requirements	24 hrs	7 days	28 days	Visual inspection, assessment of permit issuers	Instances of permit requirements not met	Nil	Visual inspection, assessmer permit issuers
1) REST AR	EAS AND	PICNIC AREA	S				·	· ·		
- Items in the							ents and/or Good Industry Practice.		1000/	
	11.1	Rest areas and picnic areas	i) Picnic areas are clean and neat in appearance.	24 hrs	28 days	6 months	Inspection records showing compliance	Instances where 90% of measured area shall have grass and weeds height between 2 in. and 8 in.	100%	N/A
			ii) Trash barrels are painted and attached to their supports to prevent stealing.					Mowing shall begin before vegetation reaches 8 in.	100%	
			iii) Site free of any visible litter, all litter properly disposed. Litter removed from the picnic area grounds and barrels before being allowed to accumulate outside of the barrels.					Number of bare ground areas larger than 5 square feet	Nil	
			iv) All vehicles used in transporting litter are equipped to prevent the accumulated litter from being strewn along the roadway.					Number of prohibited, invasive or noxious weeds present.	Nil	
					1	1	1	Occurrences of encroachment of	Nil	N/A

ATING F DATE TO ENCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET		
	Inspection records showing compliance	100%		
sment of	Instances of permit requirements not met	Nil		
	Instances where 90% of measured area shall have grass and weeds height between 2 in. and 8 in.	100%		
	Mowing shall begin before vegetation reaches 8 in.	100%		
	Number of bare ground areas larger than 5 square feet	Nil		
	Number of prohibited, invasive or noxious weeds present.	Nil		

ELEMENT	DFF		PERFORMANCE	RESPON	SE TO DEFE	стя	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD	TADOPT	INSPECTION ANI MEASUREMENT MET
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATIN COMMENCEMENT DA
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*	COMMENCEMENT		SERVICE COMMENCE
			vi) Weeds, grass and other undesirable growth are removed from beds of plants and shrubs as needed. Trees and shrubs are trimmed neatly. All curbs and sidewalks are edged and repaired.					Occurrences of deviation of soil or mulch above or below the top of the curb.	Nil	
	11.1 Cont.		vii) All picnic tables are clean, free of stains and free of any defect.					Paved surfaces maintained clean and safe with minimal obstruction.	100%	
			viii) All directional, informational, safety and any other sign is properly installed, contains accurate information and is visible from a reasonable distance.					Occurrences of undermining greater than 2"	Nil	
			ix) All striping is intact and all parking and travel areas are clearly marked.					Number of unsealed cracks $> \frac{1}{2}$ inch.	Nil	
			x) All curbs are in place and intact.					Number of lights fully functional.	100%	
2) EARTHW	ORKS, E		S AND CUTTINGS		_			_		-
	12.1	Slope Failure	All structural or natural failures of the embankment and cut slopes of the Facility are repaired	24 hrs	28 days	6 months	Visual inspection by geotechnical specialist and further tests as recommended by the specialist	Recorded instances of slope failure	Nil	Visual inspection by geotechi specialist and further tests as recommended by the speciali
* - Items in the	se column	s shall be reviewe	ed annually by Developer as part of	f the MMP to a	comply with Ter	chnical Docum	ents and/or Good Industry Practice.			
	12.2	Slopes - General	Slopes are maintained in general conformance to the original graded cross-sections, the replacement of landscaping materials, reseeding and re- vegetation for erosion control purposes and removal and disposal of all eroded materials from the roadway and shoulders	24 hrs	28 days	6 months		Inspection records showing compliance	100%	
13) ITS and E							<u></u>			
	13.1	ETCS Equipment - Maintenance	All ITS and ETCS equipment is fully functional and housing is functioning and free of defects. i) All equipment and cabinet identification numbers are visible, sites are well drained and access is clear.	24 hrs	14 days	1 month	Visual Inspection	Inspection records showing compliance	100%	Visual Inspection
			ii) Steps, handrails and accesses are kept in a good condition.							

ON AND IT METHOD RATING NT DATE TO MENCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
	Occurrences of deviation of soil or mulch above or below the top of the curb.	Nil
	Paved surfaces maintained clean and safe with minimal obstruction.	100%
	Occurrences of undermining greater than 2"	Nil
	Number of unsealed cracks $> \frac{1}{2}$ inch.	Nil
	Number of lights fully functional.	100%
geotechnical tests as specialist	Recorded instances of slope failure	Nil
	Inspection records showing compliance	100%
	Inspection records showing compliance	100%

ELEMENT	DEE		PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD	TAD COT	INSPECTION AN MEASUREMENT ME
CATEGORY	REF	ELEMENT	REQUIREMENT	Cat 1	Cat 1	Cat 2	(AFTER SERVICE	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATI COMMENCEMENT DA
				Hazard Mitigation	Permanent Remedy	Permanent Repair	COMMENCEMENT)*			SERVICE COMMENC
			iii) Access to all communication hubs, ground boxes, cabinets and sites is clear,							
	13.1 Cont.		iv) All drainage is operational and all external fixtures and fittings are in a satisfactory condition.							
			 v) All communications cable markers, cable joint markers and duct markers are visible and missing markers are replaced. vi) Backup power supply system is available at all times 							
	13.2	VES Equipment - Maintenance	All VES equipment is kept clean, the identification numbers are visible.	24 hrs	14 days	1 month	Visual Inspection	Inspection records showing compliance	100%	Visual Inspection
	13.3	Dynamic Message Sign Equipment	Dynamic Message Signs are free from faults such as: i) Any signal displaying an message which is deemed to be	2 hrs	24 hrs	14 days	Defect measurement dependent on equipment	Inspection records showing compliance	100%	Defect measurement depend equipment
			a safety hazard ii) Failure of system to clear							
			sign settings when appropriate. iii) 2 or more contiguous sign failures that prevent control office setting strategic diversions							
			iv) Signs displaying an incorrect message.							
	13.4	CCTV Equipment	CCTV Systems are free from serious faults that significantly limit the availability of the operators to monitor the area network, such as:	2 hrs	24 hrs	14 days	Defect measurement dependent on equipment	Inspection records showing compliance	100%	Defect measurement depend equipment
			i) Failure of CCTV Systems to provide control offices with access and control of CCTV images							
			ii) Failure of a CCTV camera or its video transmission system.iii) Failure of a Pan / Tilt unit or its control system.							

I AND METHOD ATING F DATE TO ENCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
	Inspection records showing	100%
	compliance	
pendent on	Inspection records showing compliance	100%
pendent on	Inspection records showing compliance	100%

ELEMENT	REF	ELEMENT	PERFORMANCE	RESPON	SE TO DEFE	CTS	INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD (AFTER SERVICE	TARGET	INSPECTION AN MEASUREMENT ME (FROM OPERATI
CATEGORY	KEF	ELEWIENI	REQUIREMENT	Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair	(AFTER SERVICE COMMENCEMENT)*	COMMENCEMENT*	TARGET	COMMENCEMENT D SERVICE COMMEN
			iv) Moisture ingress onto CCTV camera lensv) Faults that result in significant degradation of CCTV images							
	13.5	Vehicle Detection Equipment	All equipment free of defects and operational problems such as; i) Inoperable loops. ii) Malfunctioning camera controllers. iii) Side-fire Radar iv) Bluetooth probe data collection	2 hrs	24 hrs	1 month	Defect measurement dependent on equipment Traffic Detector Loops: Loop circuit's inductance to be > 50 and < 1,000 micro henries.	Inspection records showing compliance Instances of loops out of compliance	100% Nil	Defect measurement depend equipment Traffic Detector Loops: Loop circuit's inductance to and < 1,000 micro henries.
15) AMENITY	15.1	Graffiti	Graffiti is removed in a manner and using materials that restore the surface to a like appearance similar to adjoining surfaces	24 hrs	28 days	6 months	All graffiti is considered a Category 1 defect	Inspection records showing compliance	100%	All graffiti is considered a C defect
16) SNOW A	ND ICE C	ONTROL								
	16.1	Travel lanes	Maintain travel way free from snow and ice	2 hrs	N/A	N/A	Maximum 1hr response time to complete manning and loading of spreading vehicles Maximum 2hrs from departure from loading point to complete treatment and return to loading point Maximum 1hr response time for snow and ice clearance vehicles to depart from base	Inspection records showing compliance	100%	Maximum 1hr response tim complete manning and load spreading vehicles Maximum 2hrs from depart loading point to complete tr and return to loading point Maximum 1hr response tim snow and ice clearance vehi depart from base
	16.2	Weather Forecasting	Weather forecast information is obtained and assessed and appropriate precautionary treatment is carried out to prevent ice forming on the travel way	2 hrs	N/A	N/A	Operations plan details the process and procedures in place and followed	Inspection records showing compliance	100%	Operations plan details the p and procedures in place and

AND METHOD TING DATE TO ACMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
endent on	Inspection records showing compliance	100%
e to be > 50 /s.	Instances of loops out of compliance	Nil
e > 50 meg		
a Category 1	Inspection records showing compliance	100%
ime to oading of	Inspection records showing compliance	100%
arture from e treatment nt ime for		
ehicles to		
ne process and followed	Inspection records showing compliance	100%
ne process and followed	Inspection records showing compliance	100%

ELEMENT CATEGORY RI	DEE		PERFORMANCE REQUIREMENT	RESPONSE TO DEFECTS			INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD		INSPECTION AN MEASUREMENT MI
	REF	ELEMENT		Cat 1	Cat 1	Cat 2	(AFTER SERVICE COMMENCEMENT)*	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERATI COMMENCEMENT D SERVICE COMMENC
				Hazard Mitigation	Permanent Remedy	Permanent Repair				
17) INCIDENT	T RESPO	NSE								
	17.1	General	Respond to Incidents in accordance with Section 22.	1 hr	N/A	N/A	Response times met for 98% of incidents measured on a 1 year rolling basis.	Inspection records showing compliance	100%	Response times met for 98 incidents measured on a 1 rolling basis.
							No complaints from Emergency Services.			No complaints from Emerg Services.
	17.2	Hazardous Materials	For any hazardous materials spills, comply with the requirements of Section 22.	1 hr	N/A	N/A	FMP details the process and procedures in place and followed.	Inspection records showing compliance	100%	FMP details the process an procedures in place and fol
	17.3	Structural assessment	Evaluate structural damage to structures and liaise with emergency services to ensure safe working in clearing the incident	1 hr	N/A	N/A	Inspections and surveys as required by incident	Inspection records showing compliance	100%	Inspections and surveys as by incident
	17.4	Temporary and permanent remedy	Propose and implement temporary measures or permanent repairs to Defects arising from the Incident.	24 hrs	28 days	N/A	Review and inspection of the incident site	Auditable inspection records showing compliance	100%	Review and inspection of t site
			Ensure the structural safety of any structures affected by the incident							
18) CUSTOMI	ER RESP	ONSE								
* - Items in the	se column	s shall be reviewe		the MMP to o		chnical Docume	ents and/or Good Industry Practice.			
	18.1	Response to inquiries	Timely and effective response to customer inquiries and complaints.	48 hrs	28 days	N/A	Contact the customer within 48 hours following initial customer inquiry.	Number of responses within specified times	100%	Contact the customer withi following initial customer
							All work resulting from customer requests is scheduled within 48 hours of customer contact.			All work resulting from cu requests is scheduled withi of customer contact.
							Follow-up contact with the customer within 72 hours of initial inquiry.			Follow-up contact with the within 72 hours of initial in
							All customer concerns/requests are resolved to TxDOT's satisfaction within 2 weeks of the initial inquiry.			All customer concerns/requeresolved to TxDOT's satistication within 2 weeks of the initial
	18.2	Customer contact line	Telephone line manned during business hours and 24 hour availability of messaging system. Faults to telephone line or message system rectified	24 hrs	28 days	N/A	Instances of line out of action or unmanned	Operations records showing non availability including complaints from public.	Nil	Instances of line out of acti unmanned
19) SWEEPIN	G AND C	LEANING		•	·				•	•
	19.1	Sweeping	i) Keep all channels, hard shoulders, gore areas, ramps, intersections, islands and frontage roads swept clean,	24 hrs	28 days	6 months	Buildup of dirt, ice rock, debris, etc. on roadways and bridges not to accumulate greater than 24" wide or 1/2" deep	Inspection records showing compliance	100%	Buildup of dirt, ice rock, de on roadways and bridges n accumulate greater than 24 1/2" deep

AND IETHOD TING DATE TO NCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGEI
98% of 1 year	Inspection records showing compliance	100%
ergency		
and followed.	Inspection records showing compliance	100%
as required	Inspection records showing compliance	100%
f the incident	Auditable inspection records showing compliance	100%
hin 48 hours r inquiry.	Number of responses within specified times	100%
customer hin 48 hours		
he customer inquiry. quests are tisfaction tial inquiry.		
ction or	Operations records showing non availability including complaints from public.	Nil
debris, etc. not to	Inspection records showing compliance	100%

ELEMENT CATEGORY	REF	ELEMENT	PERFORMANCE REQUIREMENT	RESPONSE TO DEFECTS			INSPECTION AND MEASUREMENT METHOD	MEASUREMENT RECORD		INSPECTION AN MEASUREMENT MI
				Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair	(AFTER SERVICE COMMENCEMENT)*	(AFTER SERVICE COMMENCEMENT*	TARGET	(FROM OPERAT COMMENCEMENT D SERVICE COMMEN(
			 ii) Clear and remove debris from traffic lanes, hard shoulders, verges and central reservations, footways and cycle ways iii) Remove all sweepings without stockpiling in the right of way and dispose of at approved tip. 							
	19.2	Litter	i) Keep the right of way in a neat condition, remove litter regularlyii) Pick up large litter items before mowing operations.	24 hrs	28 days	6 months	No more than 20 pieces of litter per roadside mile shall be visible when traveling at highway speed.	Inspection records showing compliance	100%	No more than 20 pieces of roadside mile shall be visi traveling at highway speed
			Dispose of all litter and debris collected at an approved solid waste site.							

AND METHOD TING DATE TO NCMENT)	MEASUREMENT RECORD (FROM OPERATING COMMENCEMENT DATE TO SERVICE COMMENCEMENT)	TARGET
of litter per sible when ed.	Inspection records showing compliance	100%