TEXAS DEPARTMENT OF TRANSPORTATION

TECHNICAL PROVISIONS

FOR

LOOP 1604 WESTERN EXTENSION

DESIGN-BUILD PROJECT

ATTACHMENT 19-1
PERFORMANCE AND MEASUREMENT TABLE
BASELINE

JUNE 4, 2013

Table 19-1: Performance and Measurement Table Baseline

ELEMENT CATEGORY	REF	ELEMENT	PERFORMANCE REQUIREMENT	RESPONSE TO DEFECTS			INSPECTION AND MEASUREMENT METHOD*	MEASUREMENT RECORD*	TARGET
				Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair			
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*.		
	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
	1.2	Pavement	All roadways have a smooth surface course (including bridge decks, covers, gratings, frames and boxes) with adequate skid resistance and free from Defects.						
							b) Ruts – Mainlanes, shoulders & ramps10ft straight edge used to measure rut depth for localized areas.	Depth of rut at any location greater than 0.5"	100%

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	1.2 con't.	Pavement		24 hrs	28 days	6 months			Nil Nil Nil
							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: • Mainlanes, ramps - 120" per mile** • Frontage roads - 150" per mile** IRI measured throughout 98% of each lane containing a bridge deck in any Auditable Section , 0.1 mile average – 200" per mile	 100% 100% 100%
							3-ft straightedge used to measure discontinuities	Individual discontinuities greater than 0.75"	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

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							e) Edge drop-offs Physical measurement 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 E524-08 .	• 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 are in excess of 30.	100%
	1.2 con't.	Pavement		24 hrs	28 days	6 months		• 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 in excess of 30.	100%

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								• 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%
	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
							b) Base failures	Base failures of low severity or higher	Nil
	1.4	Joints in concrete	Longitudinal joint separation				Measurement of joint width and level difference of two sides of joints	Joint width more than 1" or faulting more than ¼”	Nil
2) DRAINAGE									

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	2.1	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 section clear	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%
	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
	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
	2.5	Protected Species	Named species and habitats are protected.	24 hrs	28 days	6 months	Visual inspection	Compliance with the requirement	100%
3) STRUCTURES									
	3.1	Structures having an opening	Substructures and superstructures are free of:	24 hrs	28 days	6 months	Inspection and assessment in accordance with the	Records as required in the TxDOT Bridge Inspection	

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		measured along the centre of the roadway of more than 20 feet between undercopings of abutments or springlines of arches or extreme ends of openings or multiple boxes	• 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				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.	Manual Occurrences of condition rating below seven for any deck, superstructure or substructure All condition states to be one for all structure components	Nil 100%
	3.2	Structure components	i) Expansion joints are free of: • dirt debris and vegetation • defects in drainage systems	24 hrs	28 days	6 months	Inspection and assessment in accordance with the requirements of federal National Bridge Inspection	Records as required in the TxDOT Bridge Inspection Manual	Nil
	3.2 con't.	Structure Components	• loose nuts and bolts • defects in gaskets ii) The deck drainage system is free of all and operates as intended. iii) Parapets are free of: • loose nuts or bolts • blockages of hollow section drain holes • graffiti • vegetation	24 hrs	28 days	6 months	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.	Occurrences of condition rating below seven for any deck, superstructure or substructure All condition states to be one for all structure components	100%

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			• accident damage 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						
	3.2 con't.	Structure Components	devices is maintained.	24 hrs	28 days	6 months			
	3.3	Non-bridge class culverts	Non-bridge-class culverts are free of: • vegetation and debris and silt • defects in sealant to	24 hrs	28 days	6 months	Visual inspection	Number with vegetation, debris and silt Number with defects in sealant and	Nil Nil

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			movement joints • scour damage					movement joints Number with scour damage	 Nil
	3.4	Gantries and high masts	Sign signal gantries, high masts are structurally sound and free of: • loose nuts and bolts • defects in surface protection systems • graffiti	24 hrs	28 days	6 months	Visual inspection	Number with loose assemblies Number with defects in surface protection Number with graffiti	Nil Nil Nil
4) PAVEMENT MARKINGS, OBJECT MARKERS, BARRIER MARKERS AND DELINEATORS									
	4.1	Pavement markings	Pavement markings are: • clean and visible during the day and at night • whole and complete and of the correct color, type, width and length • placed to meet the TMUTCD and TxDOT's Pavement Marking Standard Sheets	24 hrs	28 days	6 months	a) Markings - General Portable retroreflectometer, which uses 30 meter geometry meeting the requirements described in ASTM E 1710 Physical measurement b) Profile Markings Visual inspection	Length meeting the minimum retroreflectivity 175 mcd/sqm/lx for white Length meeting the minimum retroreflectivity 125 mcd/sqm/lx for yellow Length with more than 5% loss of area of material at any point Length with spread more than 10% of specified dimensions. Length performing its intended function and	100% 100% Nil Nil 100%

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								compliant with relevant regulations	
	4.2	Raised reflective markers	Raised reflective pavement markers, object markers and delineators are: • Clean and clearly visible • Of the correct color and type • Reflective or retroreflective as TxDOT standard • Correctly located, aligned and at the correct level • Are firmly fixed • Are in a condition that will	24hrs	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.) A minimum of four markers should be visible at 80' spacing when viewed under	Nil 100%
	4.2 con't.	Raised reflective markers	ensure that they remain at the correct level.	24 hrs	28 days	6 months		under low beam headlights. Uniformity (replacement rpms having equivalent physical and performance characteristics to adjacent markers).	 100%
	4.3	Delineators & Markers	Object markers, mail box markers and delineators are: • clean and visible • of the correct color and type • legible and reflective • Straight and Vertical	24 hrs	28 days	6 months	Visual inspection	Number of object markers or delineators defective or missing	Nil

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5) GUARDRAILS, SAFETY BARRIERS AND IMPACT ATTENUATORS									
	5.1	Guard rails and safety barriers	All guardrails, safety barriers, concrete barriers, etc... are maintained free of Defects. They are appropriately placed and correctly installed at the correct height and distance from roadway or obstacles. Installation and repairs shall be carried out in accordance with the requirements of NCHRP 350 standards.	24 hrs	28 days	6 months	Visual inspection	Length of road restraint systems correctly installed Length free from defects Length at correct height Length at correct distance from roadway and obstacle	100% 100% 100% 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%
6) TRAFFIC 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 ii) Identification markers are provided, correctly located, visible, clean and legible	24 hrs	28 days	6 months	**a) Retroreflectivity** Coefficient of retro reflectivity **b) Face damage** Visual inspection	Number of signs with reflectivity below the requirements of TxDOT's TMUTCD Number of signs with face damage greater than 5% of area	Nil Nil

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			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%
			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				**d) Obsolete signs** Visual inspection	Number of obsolete signs	Nil
			v) Obsolete and redundant signs are removed or replaced as appropriate vi) Visibility distances meet the stated requirements				**e) Sign Information** Visual inspection	Sign information is of the correct size, location, type and wording to meet its intended purpose	100%
			vii) Sign information is of the correct size, location, type and wording to meet its intended purpose and any statutory requirements				**f) Dynamic Message Signs** Visual inspection	Dynamic message signs are fully functioning	100%
	6.1 con't.	General – All Signs	viii) All structures and 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	24 hrs	28 days	6 months			
	6.2	General - Safety critical signs	i) Requirements of the TMUTCD ii) Dynamic message signs are	2hrs	1 week	6 months	Visual inspection	Number of damaged Safety critical signs	Nil

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			in an operational condition						
7) TRAFFIC SIGNALS									
	7.1	General	i) Traffic Signals and their associated equipment are: • clean and visible • correctly aligned and operational • free from damage caused by accident or vandalism • 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	2 hrs	24 hrs	6 months	**a) General condition** Visual inspection **b) Damage** Visual inspection **c) Signal timing** Timed measurements **d) Contingency plans** Records Review	Signals are clean and visible Signals are undamaged Installations have correct signal timings Full contingency plans are in place	100% 100% 100% 100%
	7.2	Soundness	Traffic Signals are structurally and electrically sound	24 hrs	28 days	6 months	**a) Structural soundness** Visual inspection **b) Electrical soundness**	Inspection records showing	100%
	7.2 con't.	Soundness		24 hrs	28 days	6 months	Testing to meet NEC regulations	safe installation and maintenance	
	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%
	7.4	Pedestrian	All pedestrian elements and	24 hrs	28 days	6	Visual Inspection	Inspection records showing	100%

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		Elements and Vehicle Detectors	vehicle detectors are correctly positioned and fully functional at all times			months		compliance	
8) LIGHTING									
	8.1	Roadway Lighting – General	i) All lighting is free from defects and provides acceptable uniform lighting quality ii) Lanterns are clean and correctly positioned iii) Lighting units are free from accidental damage or vandalism iv) Columns are upright, correctly founded, visually acceptable and structurally sound	24 hrs	28 days	6 months	**a) Mainlane lights operable** Night time inspection or automated logs **b) Mainlane lights out of action** Night time inspection or automated logs	Number of sections with less than 90% of lights functioning correctly at all times Instances of more than two consecutive lights out of action	Nil Nil
	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
	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%
	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

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	8.5	High Mast Lighting	i) All high mast luminaries functioning on each pole ii) All obstruction lights are present and working (if required) 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)	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 Identification of other defects	Nil Nil
9) FENCES, WALLS AND SOUND ABATEMENT									
	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%
	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%
10) ROADSIDE MANAGEMENT									

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	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%
			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%
			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
			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%
			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
			vi) Wildflowers are preserved utilizing the guidelines in the mowing specifications						

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	10.1 con't.	Vegetated Areas – Except landscaped areas – General	and TXDOT *Roadside Vegetation Manual*.	24 hrs	7 days	28 days			
	10.2	Landscaped Areas	i) All landscaped areas are maintained to their originally construction condition. Landscaped areas are as designated in the plans. 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 and weeds is kept between 2" and 8". Mowing begins before vegetation reaches 8" iv) Damaged or dead vegetation is replaced.	24 hrs	7 days	28 days	Visual inspection	Inspection records showing compliance	100%
	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

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	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. 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.	24 hrs	7 days	28 days	Visual inspection	Inspection records showing compliance	100%
	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

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11) REST AREAS AND PICNIC AREAS									
	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%
			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

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			v) Vegetation damaged due to improper or careless mowing and trimming operations or any other reason is replaced.					Occurrences of encroachment of vegetation or debris for more than two (2) inches onto any curb or sidewalk located throughout each rest area.	Nil
	11.1 cont	Rest areas and picnic areas	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.	24 hrs	28 days	6 months		Occurrences of deviation of soil or mulch above or below the top of the curb.	Nil
			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 type of signage 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 > ½ inch.	Nil
			x) All curbs are in place and intact.					Number of lights fully functional.	100%
12) EARTHWORKS, EMBANKMENTS AND CUTTINGS									

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	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
	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 ETCS EQUIPMENT									

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	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. ii) Steps, handrails and accesses are kept in a good condition. iii) Access to all communication hubs, ground boxes, cabinets and sites is clear, 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	24 hrs	14 days	1 month	Visual Inspection	Inspection records showing compliance	100%
13) ITS and ETCS EQUIPMENT									
	13.1 con't.	ETCS Equipment – Maintenance	markers are replaced. vi) Backup power supply system is available at all times	24 hrs	14 days	1 month	Visual Inspection	Inspection records showing compliance	100%
	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%

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	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 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.	2 hrs	24 hrs	14 days	Defect measurement dependent on equipment	Inspection records showing compliance	100%
	13.4	CCTV Equipment	CCTV Systems are free from faults that limit the availability of the operators to monitor the area network, such as: 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	2 hrs	24 hrs	14 days	Defect measurement dependent on equipment	Inspection records showing compliance	100%
	13.4 con't.	CCTV Equipment	system. iii) Failure of a Pan / Tilt unit or its control system. iv) Moisture ingress onto CCTV camera lens v) Faults that result in significant degradation of CCTV images	2 hrs	24 hrs	14 days	Defect measurement dependent on equipment	Inspection records showing compliance	100%

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ELEMENT CATEGORY	REF	ELEMENT	PERFORMANCE REQUIREMENT	RESPONSE TO DEFECTS			INSPECTION AND MEASUREMENT METHOD*	MEASUREMENT RECORD*	TARGET
				Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair			
	13.5	Vehicle Detection Equipment	All equipment free of defects and operational problems such as; i) Inoperable loops. ii) Malfunctioning camera controllers.	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. Insulation resistance to be > 50 meg ohms.	Inspection records showing compliance Instances of loops out of compliance	100% Nil
14) TOLLING Facilities and Buildings (Not Used)									
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%
16) SNOW AND ICE CONTROL									
	16.1	Travel lanes	Maintain travel way free from snow and ice	2hrs	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	Inspection records showing compliance	100%
	16.1 con't.	Travel lanes		2hrs	N/A	N/A	Maximum 1hr response time for snow and ice clearance vehicles to depart from base		
17) INCIDENT RESPONSE									
	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	Inspection records showing compliance	100%

Table 19-1: Performance and Measurement Table Baseline

ELEMENT CATEGORY	REF	ELEMENT	PERFORMANCE REQUIREMENT	RESPONSE TO DEFECTS			INSPECTION AND MEASUREMENT METHOD*	MEASUREMENT RECORD*	TARGET
				Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair			
							rolling basis. No complaints from Emergency 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%
	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	Incident reports showing compliance	100%
	17.4	Temporary and permanent remedy	Propose and implement temporary measures or permanent repairs to Defects arising from the Incident.	24hrs	28 days	N/A	Review and inspection of the incident site	Auditable inspection records showing compliance	100%
	17.4 con't.	Temporary and permanent remedy	Ensure the structural safety of any structures affected by the incident.	24hrs	28 days	N/A			
18) CUSTOMER RESPONSE									
	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%

Table 19-1: Performance and Measurement Table Baseline

ELEMENT CATEGORY	REF	ELEMENT	PERFORMANCE REQUIREMENT	RESPONSE TO DEFECTS			INSPECTION AND MEASUREMENT METHOD*	MEASUREMENT RECORD*	TARGET
				Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair			
							All work resulting from customer requests is scheduled within 48 hours of customer contact. Follow-up contact with the customer within 72 hours of initial inquiry. All customer concerns/requests are resolved to TxDOT's satisfaction within 2 weeks of the initial inquiry.		
	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
19) SWEEPING AND CLEANING									
	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%

Table 19-1: Performance and Measurement Table Baseline

ELEMENT CATEGORY	REF	ELEMENT	PERFORMANCE REQUIREMENT	RESPONSE TO DEFECTS			INSPECTION AND MEASUREMENT METHOD*	MEASUREMENT RECORD*	TARGET
				Cat 1 Hazard Mitigation	Cat 1 Permanent Remedy	Cat 2 Permanent Repair			
	19.1 con't.	Sweeping	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.	24 hrs	28 days	6 months			
	19.2	Litter	i) Keep the right of way in a neat condition, remove litter regularly. ii) Pick up large litter items before mowing operations. iii) Dispose of all litter and debris collected at an approved solid waste site.	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%