



Texas Department of Transportation

DESIGN-BUILD SPECIFICATIONS Items 10-28

Attachment 27-2 Baseline Inspection Requirements May 2025

ATTACHMENT 27-2: BASELINE INSPECTION REQUIREMENTS

| Provide photographic records and physical measurements referenced by location to establish an agreed reference condition for each Performance Section as follows: | | | | |
|---|---------------------------|-------------------------------|------------------|--|
| ELEMENT CATEGORY | ELEMENT | INSPECTION/MEASUREMENT METHOD | MEASUREMENT REF* | MEASUREMENT RECORD |
| 1) PAVEMENT | | | | |
| 1.1 | Ride quality | Physical measurement | 1.1.1 | Location and depth of any individual discontinuity (e.g. bumps and depressions) that is greater than 3/4" |
| 1.2 | Edge drop-offs | Physical measurement | 1.2.1 | Location and depth of any individual edge drop-offs that is greater than 2" for more than 10 feet in length |
| 1a) PAVEMENT (ASPHALT) | | | | |
| 1a.1 | Ruts | Physical measurement | 1a.1.1 | Location and depth of any individual rut that is greater than 1/2" |
| 1a.2 | Cracking | Physical measurement | 1a.2.1 | Location and length of any unsealed cracking with a width greater than 1/4" and a length exceeding 5 feet. |
| 1b) PAVEMENT (CRCP) | | | | |
| 1b.1 | Spalled Cracks | Physical measurement | 1b.1.1 | Location and length of any individual spalling of any crack greater than 12" length |
| 1b.2 | Popouts and Punchouts | Physical measurement | 1b.2.1 | Location and number of any popouts greater than 4" wide or long exceeding a depth of 1"; Location and number of any punchout with a maximum dimension of 24" or more exceeding 1/4" vertical fault dimension compared to adjacent intact slab |
| 1b.3 | Longitudinal Cracking | Physical measurement | 1b.3.1 | Location and length of any longitudinal cracks with width exceeding 1/8" |
| 1c) PAVEMENT (JCP) | | | | |
| 1c.1 | Damaged Joints and Cracks | Physical measurement | 1c.1.1 | Location and length of any individual spalling of joints or cracks more than 3" in width and greater than 12" length |

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| 1c.2 | Slabs with cracks in multiple directions | Visual Inspection | 1c.2.1 | Location and number of any slabs separated into three or more pieces by a combination of transverse cracks and longitudinal cracks of any width extending from edge to edge of the slab |
| 1c.3 | Slabs with Longitudinal Cracks | Physical measurement | 1c.3.1 | Location and length of any longitudinal cracks in any slab with width exceeding 1/8" |
| 2) DRAINAGE | | | | |
| 2.1 | Non-bridge class culverts, pipes, ditches, channels, catch basins, inlets, manholes and outfalls | Visual Inspection | 2.1.1 | General condition |
| 2.2 | Drainage treatment devices | Visual Inspection | 2.2.1 | General condition |
| 2.4 | Erosion | Visual inspection | 2.4.1 | Location and general condition of any erosion greater than 12" deep along ditches, swales, ponds, and channels |
| 2.5 | Channels and ditches - Permanent erosion control measures | Visual inspection | 2.5.1 | Location and general condition of any undermined or damaged erosion control measures |
| 3) STRUCTURES | | | | |
| 3.1 | Structures components | Visual inspection | 3.1.1 | General condition |
| | | Physical measurement and records of previous inspection | 3.1.2 | Location of any individual deck, superstructure or substructure with condition rating less than seven (7) |
| 3.3 | Gantries and high-masts | Visual inspection | 3.3.1 | General condition |
| 3.4 | Access points | Visual inspection | 3.4.1 | General condition |
| 3.5 | Retaining walls | Visual inspection | 3.5.1 | General condition |
| 4) PAVEMENT MARKINGS, OBJECT MARKERS, BARRIER MARKERS AND DELINEATORS | | | | |
| 4.1 | Pavement markings | a) Markings - General Visual inspection (to include a record of visibility of markings under low beam headlights) | 4.1.1 | Marking visibility under low-beam headlight |
| | | Physical measurement | 4.1.2 | Location and length of pavement marking where there is loss of material |

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| | | b) Profile markings - visual inspection | 4.1.3 | General condition |
| 4.2 | Raised reflective markers | Visual inspection | 4.2.1 | Location and number of raised reflective markers that are ineffective in any 10 consecutive markers (ineffective includes missing, damaged, settled or sunk) |
| 4.3 | Delineators & Markers | Visual inspection | 4.3.1 | General condition |
| 5) CURBS, GUARDRAILS, SAFETY BARRIERS AND IMPACT ATTENUATORS | | | | |
| 5.1 | Curbs | Visual inspection | 5.1.1 | General condition |
| 5.2 | Guardrails and safety barriers | Visual inspection | 5.2.1 | General condition |
| 5.3 | Impact attenuators | Visual inspection | 5.3.1 | General condition |
| 6) TRAFFIC SIGNS | | | | |
| 6.1 | General – All signs | Visual inspection | 6.1.1 | General condition |
| 6.2 | Warning and regulatory signs | Visual inspection | 6.2.1 | General condition |
| 7) TRAFFIC SIGNALS | | | | |
| 7.1 | General | Visual inspection | 7.1.1 | General condition |
| 7.2 | Pedestrian elements and vehicle detectors | Visual inspection | 7.2.1 | General condition |
| 8) LIGHTING | | | | |
| 8.1 | Roadway lighting - general | Visual inspection | 8.1.1 | General condition |
| 8.2 | Sign lighting | Visual inspection | 8.2.1 | General condition |
| 8.3 | Aesthetic lighting | Visual inspection | 8.3.1 | General condition |
| 8.4 | Electrical supply | Visual inspection | 8.4.1 | General condition |
| 8.5 | Access panels | Visual inspection | 8.5.1 | General condition |
| 8.6 | High-mast lighting | Visual inspection | 8.6.1 | General condition |
| 9) FENCES, WALLS AND SOUND ABATEMENT | | | | |
| 9.1 | General | Visual inspection | 9.1.1 | General condition |
| 10) ROADSIDE MANAGEMENT | | | | |
| 10.6 | Sidewalks and pedestrian curb ramps | Visual inspection | 10.6.1 | General condition |
| 11) REST AREAS AND PICNIC AREAS (NOT USED) | | | | |
| 12) EARTHWORKS, EMBANKMENTS AND CUTTINGS | | | | |
| 12.1 | Slope failure | Visual inspection | 12.1.1 | Location and severity of any slope failure |

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| 12.2 | Slopes – General | Visual inspection | 12.2.1 | General condition |
| 12.3 | Slopes – Erosion | Visual inspection | 12.3.1 | Location and depth of any erosion greater than 6" deep |
| 12.4 | Slopes – Permanent Erosion Control Measures | Visual inspection | 12.4.1 | Location and general condition of any undermined or damaged erosion control measures |
| 13) ITS EQUIPMENT | | | | |
| 13.1 | ITS Equipment-Maintenance | Visual inspection and records of malfunction | 13.1.1 | General condition |
| 13.2 | Dynamic Message Sign Equipment | Visual inspection and records of malfunction | 13.2.1 | General condition |
| 13.3 | CCTV Equipment | Visual inspection and records of malfunction | 13.3.1 | General condition |
| 13.4 | Vehicle Detection Equipment | Visual inspection and records of malfunction | 13.4.1 | General condition |

Notes

* Measurement ref to be cross-referenced with Attachment 27-1.