

Assessment Details Sheet

	Poor	Critical
Invert Deterioration	<input type="checkbox"/> Perforations visible and/or connection hardware failing (metal) <input type="checkbox"/> Heavy abrasion and scaling with exposed steel reinforcement (concrete) <input type="checkbox"/> Heavy abrasion or scour damage (plastic) <input type="checkbox"/> Displaced mortar and/or blocks, holes in invert area (masonry)	<input type="checkbox"/> Holes or section loss with extensive voids beneath invert and/or embankment/roadway damage <input type="checkbox"/> Holes and gaps with extensive infiltration of soil, bedding or backfill material (masonry)
Joints and Seams	<input type="checkbox"/> Open or displaced with significant infiltration of soil and/or leakage of water and voids visible <input type="checkbox"/> Missing mortar or displaced blocks (masonry)	<input type="checkbox"/> Open or displaced with significant infiltration of soil and accompanying embankment/roadway damage
Cross-Section Deformation	<input type="checkbox"/> Significant perceptible deformation <input type="checkbox"/> Deformation with accompanying longitudinal cracking (concrete)	<input type="checkbox"/> Excessive deformation resulting in significant reduction of available flow area, and/or extensive infiltration of soil, voids, structural failure or embankment/roadway damage
Structural Integrity of Barrel	<input type="checkbox"/> Open cracks >1/8" wide (concrete) or missing and/or displaced blocks (masonry) with voids and significant infiltration of soil and/or leakage of water <input type="checkbox"/> Several splits, tears and cracks >6" long (plastic) <input type="checkbox"/> Significant deformation of liner or wall buckling (plastic) <input type="checkbox"/> Heavy rust staining and/or exposed steel reinforcement in sides and top of barrel (concrete)	<input type="checkbox"/> Cracks, tears, splits, bulges, holes or section loss have led to extensive infiltration of soil, structural failure, voids and embankment/roadway damage
Channel Alignment	<input type="checkbox"/> The stream channel approaches the crossing at an angle of 45-70 degrees from the centerline of the structure.	<input type="checkbox"/> The stream channel approaches the crossing at an angle of 70-90 degrees from the centerline of the structure.
Structural (Longitudinal) Alignment	<input type="checkbox"/> Significant horizontal or vertical misalignment of the pipe (Note: do not confuse this with constructed pipe bends)	<input type="checkbox"/> Significant misalignment resulting in deformation of pipe or embankment/roadway damage
Footings	<input type="checkbox"/> Top portion of footing exposed, but no cracking or breaking off of flakes or chips	<input type="checkbox"/> Footing exposed with signs of cracking or breaking off of flakes or chips <input type="checkbox"/> Bottom of footing exposed and/or undercut
Headwall/Wingwalls	<input type="checkbox"/> Cracking or breaking off of flakes or chips affecting >50% of area and/or exposed steel reinforcement <input type="checkbox"/> Gap >4" between barrel and wall <input type="checkbox"/> Footing exposed and undermined	<input type="checkbox"/> Partially or totally collapsed with damage to embankment/roadway
Flared End Section	<input type="checkbox"/> Significant cracks, piping or undermining affects >50% of section <input type="checkbox"/> End crushed or separated from barrel	<input type="checkbox"/> Deterioration is significantly affecting performance and/or causing embankment/roadway damage
Bouyancy or Crushing	<input type="checkbox"/> Light to moderate denting or deformation of inlet and/or outlet end of flexible pipe culvert. The invert of the inlet is at the streambed elevation (no uplift).	<input type="checkbox"/> Invert of inlet bent upward above streambed or mitered edges crumpled inward.
Blockage at Opening	<input type="checkbox"/> Debris/sediment/vegetation blocks 1/3 or more of the inlet opening	<input type="checkbox"/> Sediment blocks more than 1/2 the inlet opening (and not designed that way for aquatic organism passage)
Apron Protection	<input type="checkbox"/> Significant cracking affects >50% of apron. Significant piping or undermining.	<input type="checkbox"/> Partially or totally collapsed, significantly affecting performance and/or causing embankment/roadway damage.
Embankment Piping	<input type="checkbox"/> Slight pavement cracking above the culvert, perhaps with a noticeable bump/depression when driving, but no evidence of holes in the embankment or soil infiltration in the culvert barrel.	<input type="checkbox"/> Partially or totally failed, significantly affecting performance and/or causing embankment/roadway damage or undermining of the culvert barrel or footings.