DISTRESS AND ASSOCIATED REPAIR GUIDELINES

1. **Edge / longitudinal and transverse cracks (greater than 1/8-inch and less than 3/4-inch wide):**
   
   1.1. Clean the crack using high-pressure air, hot-air blasting or high-pressure water.
   
   1.1.1. Clear debris out of the area and out of cracks
   
   1.1.2. Make sure the crack is dry before applying sealer materials (sealer will not bond in wet conditions)
   
   1.2. After cleaning cracks, check for crack depth. For the medium (1/2 to 3/4 inch) cracks, install a backer rod in cracks deeper than 2-inches to conserve sealant.
   
   1.2.1. The backer rod should be compressible, non-shrinking, nonabsorbent material with a melting point higher than the temperature of the sealant.
   
   1.2.2. The backer rod should be about 25% larger than the crack width.
   
   1.3. Fill cracks with modified-asphalt crack sealer ASTM D 6690, or equal
   
   1.3.1. Squeegee spillage and excess material on the pavement surface.
   
   1.3.2. Dust the surface of the sealer with dry blotter sand to avoid tracking of sealant by traffic.

2. **Localized Fatigue (Alligator) Cracking and Depressed Pavements:**

   2.1. Saw cut a rectangular (or square) perimeter for the localized repair
   
   2.1.1. Mark the perimeter at least one foot outside observed distresses
   
   2.1.2. Saw cut the perimeter through the full depth of asphalt so that the patch has a vertical face.
   
   2.2. Remove asphalt and unstable base material to a depth no greater than 6-inches. Compact remaining base or subgrade soils using a plate compactor. No standing water in patch area.
   
   2.3. Apply a tack coat to the perimeter face of the patch to create a bond.
   
   2.4. Place dense-graded hot-mix asphalt (HMA) in the patch area (in layers no greater than 3-inches) and compact after each layer using the plate compactor (or small roller on larger areas).
   
   2.4.1. Place and spread the mix carefully to avoid segregation of the aggregate
   
   2.4.2. Do not overfill the patch area on the final lift in anticipation of vehicular traffic compaction.
   
   2.4.3. Compact each layer thoroughly. Compaction / densification of the patching material is key to a successful repair.