

### PROJECT ALTERNATIVE DESCRIPTIONS

#### **Alternative 1: No Build**

Alternative 1 would maintain the existing conditions of the bridge in its current state of repair. This No Build alternative will not address structural, geometric and operational deficiencies of the bridge. Routine repair of the bridges will be performed as required.

#### **Alternative 2: Rehabilitation**

Alternative 2 would include extensive rehabilitation of the bridge. The existing superstructure of the bridge would be rehabilitated in order to meet current design standards. Limited substructure rehabilitation would also be performed.

#### **Alternative 3: Bridge Replacement (6' Sidewalks)**

Alternative 3 would replace the bridge to address structural, geometric and operational deficiencies of the bridge. The roadway profile of the bridge will be slightly raised to limit impacts to the hydraulic capacity. The bridge will be widened to accommodate a standard roadway cross section and pedestrian sidewalks while maintaining the existing centerline horizontal alignment. This alternative widens the bridge to an out-to-out width of 55'-4" and provides a 6' sidewalk, an 8' shoulder and a 12' travel lane in each direction. The new bridge will impact right-of-way on the south side.

#### **Alternative 4: Bridge Replacement (6' & 8' Sidewalks)**

Alternative 4 would replace the bridge to address structural, geometric and operational deficiencies of the bridge. The roadway profile of the bridge will be slightly raised to limit impacts to the hydraulic capacity. The centerline horizontal alignment of the bridge will be shifted to the north to accommodate the roadway cross section and pedestrian sidewalks while maintaining the existing out-to-out width of approximately 47'. This alternative provides a 6' sidewalk on the north side, a 3' shoulder and a 12' travel lane in each direction, and an 8' sidewalk on the south side. The new bridge will stay within the existing right-of-way.

#### **Alternative 5: Bridge Replacement (5' Sidewalks)**

Alternative 5 would replace the bridge to address structural, geometric and operational deficiencies of the bridge. The roadway profile of the bridge will be slightly raised to limit impacts to the hydraulic capacity. The centerline horizontal alignment of the bridge will be shifted to the north to accommodate the roadway cross section and pedestrian sidewalks. This alternative widens the bridge to an out-to-out width of 47'-2" and provides a 5' sidewalk, a 5' shoulder and a 12' travel lane in each direction. The new bridge will stay within the existing right-of-way.

#### **Alternative 6: Bridge Replacement (5' Sidewalks with Curb Extensions)**

Alternative 6 replaces the bridge exactly as described in Alternative 5, except curb extensions would be added to more quickly meet up with the existing cross-section on either side of the bridge.

#### **Alternative 7: Bridge Replacement (6' Sidewalks with Curb Extensions)**

Alternative 7 replaces the bridge as described in Alternative 6, except this alternative provides a 6' sidewalk, a 4' shoulder and a 12' travel lane in each direction.

*For Alternatives 3, 4, 5, 6 and 7 the new bridge could utilize either of the following structural options:*

- *Option A - Prestressed Concrete Beams for a single-span*
- *Option B - Prestressed Concrete Beams for a single-span that utilizes a faux arch*
- *Option C - Concrete culvert for a three-barrel arch*