

# Conceptual Design of Loop Trail

West of East Medical Center Drive Bridge

Prepared on behalf of WBWC -- Revised November 30, 2021

This document illustrates how an ADA-compliant loop trail can be built west of East Medical Center Drive to connect under the bridge to existing trails to the east. Only a single loop is needed, not a series of switchbacks. Because of cross slopes, suitable grading or bank retention will be needed.

## Description of map

- Yellow lines connect conceptual reference points. (The points and lines can of course be adjusted as needed in the final design.)
- Red labels at the vertices show the elevation of the points (in feet above sea level). Three of the elevations are from Google Earth and are believed to be fairly accurate, because they correspond to on-site measurements. The elevation of the point on the bridge's west sidewalk is calculated by on-site measurement of the vertical distance between the sidewalk and the concrete pad below the bridge.
- Black labels along the yellow lines show the approximate lengths of the lines (run), the vertical drops along them, and the percent grades. Line lengths are approximated using on-site measurements and Google Earth. Vertical drops are the differences in vertex elevations. Grades are drop divided by run. Calculated grades correspond to rough on-site measurements of the pitch angles, which were about 3 degrees for all three lines. (The  $\sin(3^\circ) \approx \tan(3^\circ) \approx 0.05$ .) (The runs here are actually the hypotenuse rather than the adjacent side that is used to calculate grade, but since the runs are approximate and the angles are small, the hypotenuse  $\approx$  the adjacent side, and the sine  $\approx$  the tangent.)
- Dashed orange lines illustrate a conceptual loop trail through the vertices.

