

CARLISLE TRAILS COMMITTEE

Memo

To: Carlisle Conservation Commission
From: Alan Ankers, Chair, Carlisle Trails Committee
Re: Twin Peaks Boardwalk RDA
Date: June 4, 2024

As requested by Mass DEP reviewer Alicia Geilen, I have reviewed the parameters of these stream crossings with reference to the Stream Crossing Standards included in the Division of Ecological Restoration's "Massachusetts Stream Crossings Handbook," with particular attention to the crossing span and openness.

For the longer boardwalk (Boardwalk 1), the bankfull width of the stream is 11 feet. Our original intent was to space the supports 11 feet 6 inches apart. In order to achieve the required minimum of 1.2 times the bankfull width, we will move those supports outwards slightly to give a clear span of 13 feet 4 inches. With this configuration, the cross-sectional area under the boardwalk is approximately 13 square feet; the length of the crossing (width of the boardwalk) is 2 feet 8 inches, which gives an openness ratio of 4.8, well in excess of the required minimum of 0.82.

The shorter boardwalk (Boardwalk 2) has a bankfull width of less than 4 feet. Our supports will be spaced seven feet apart, which is at least 1.75 times the bankfull width. The cross-sectional area under the boardwalk is approximately 4 square feet; the length of the crossing (width of the boardwalk) is 2 feet 8 inches, which gives an openness ratio of 1.5, well in excess of the required minimum of 0.82.

