

Review of the Beattie Pond Simulation in Exhibit C-1

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Introduction

On September 18, 2019, Central Maine Power provided Maine DEP an alternative route—the so called Merrill Strip TWP Alternative—for the New England Clean Energy Connect Project that was further from Beattie Pond than the original proposal. Simulations were provided for this alternative in Exhibit C-1. I have been asked to comment on the accuracy of the simulations.

I do not have a GIS file of the alternative route; however, the simulation does include a location map locating the structures and a table of the structure heights, as shown in Figure 1.

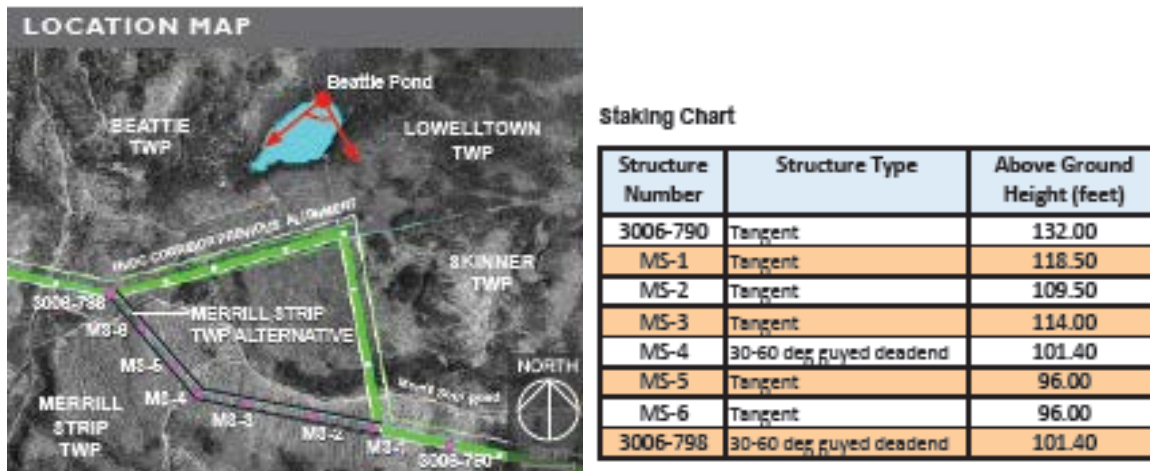


Figure 1. The location map for the Merrill Strip TWP alternative and structure heights taken from the photosimulation in Exhibit C-1.

Structure MS-1 is second from the left in the simulation. The location of this structure is included in the original submission. Assuming a person standing at an elevation of approximately 10 meters with a 1.5 meter eye-level; the structure's height is 36 meters. Figure 2 shows a line-of-sight from the photosimulation viewpoint to the top (dashed line) and bottom (solid line) of the MS-1 structure. The black dot on the left represents the viewer's eye-level and the yellow line on the right represents the MS-1 structure. The wavy green line is the terrain that would be visible if it were not covered by trees, and the red wavy line is the terrain that would be screened. The MS-1 structure would be screened by the terrain alone. Two 12-plus meter (40-foot) "trees" are also portrayed to give an indication of the apparent position of the MS-1 structure in the view. The relative size of the

MS-1 structure appears reasonable, given the rough nature of the drawing and approximate tree heights.

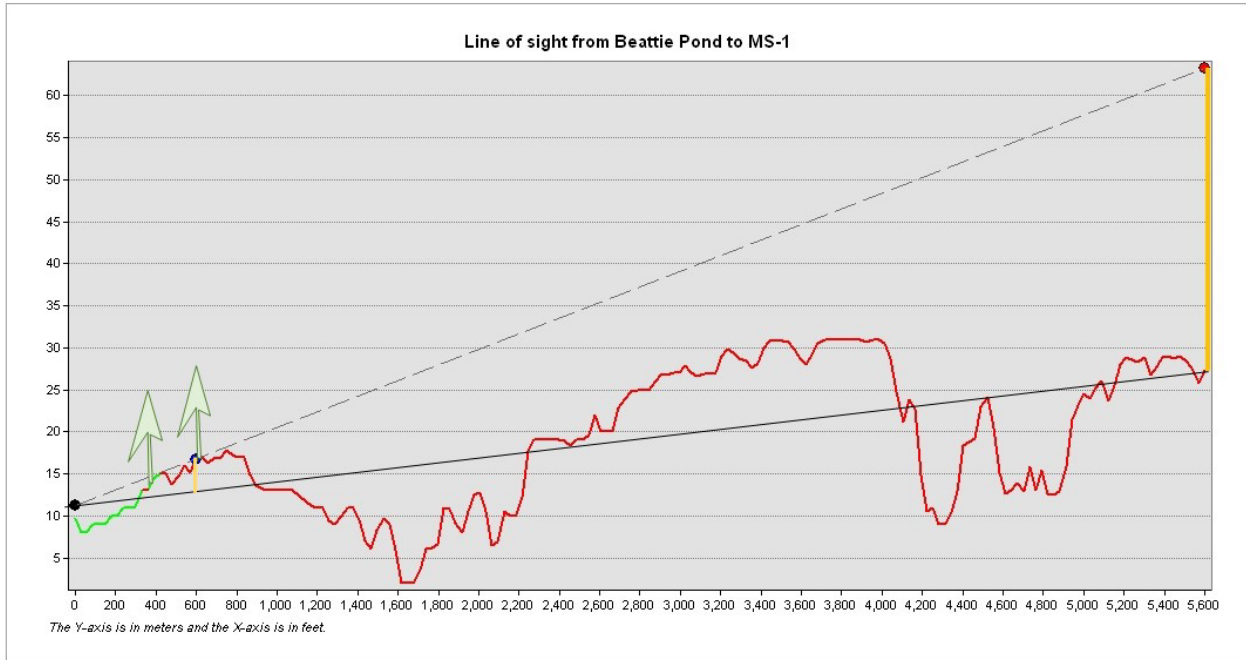


Figure 2. Line of sight from a viewer's eye-level (1.5 meters) on the northern shore of Beattie Pond to the 36-meter-tall structure MS-1 represented by the yellow line on the right side.

Structure 3006-798 is on the far right in the simulation. The location of this structure is also in the original submission. The new structure is 101.4 feet (31 meters) high. Figure 3 shows a line-of-sight diagram to structure 3006-798 using the same conventions as used for Figure 2. In this case, the structure will be visible over bare terrain, but would be screened by 40-foot trees. The relative size of this structure also appears to be accurate in the simulation.

It appears to me that the new route would be hidden from the viewpoint at the northern end of Beattie Pond. I expect that these structures will also be hidden from other locations on the pond, since the shoreline trees will screen even higher structures as one gets close to them.

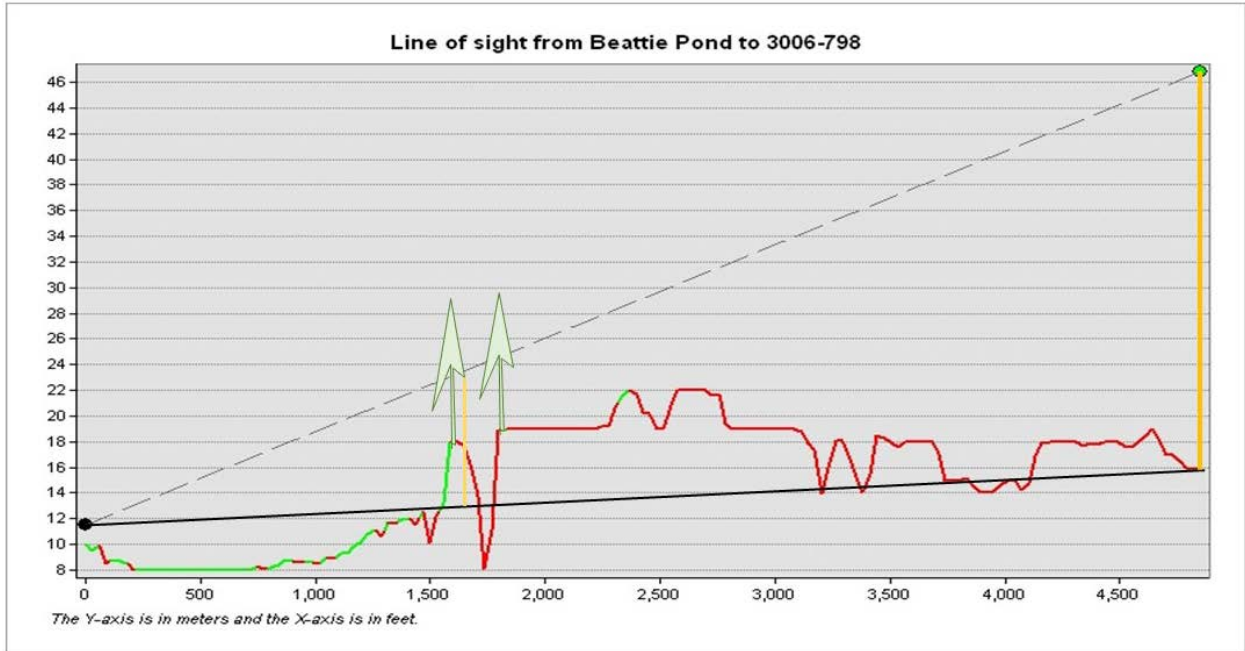


Figure 3. Line of sight from a viewer's eye-level (1.5 meters) on the northern shore of Beattie Pond to the 31-meter-tall structure 3006-798 represented by the yellow line on the right side.