



MEMORANDUM

To: Alecia DiMario
From: Jeremy Owens, Senior Landscape Architect
Date: December 17, 2021
Re: Birchwood – Site Lighting and Tree Shading Memo

While preparing a landscape plan for the proposed parking lot expansion at Birchwood, we did not incorporate trees at two locations within the parking area due to the presence of existing site light fixtures. These fixtures provide lighting of and for pedestrians navigating the site after sunset, as well as provide light for the access road that enters the site from Starr Farm Road to the north. These existing fixtures also provide lighting for the proposed parking expansion area surface.

If you were to plant trees in these islands (see magenta outlines in Figure 1 below), they would eventually significantly interfere with the light distribution on the site, which you are relying on for safe illumination after sunset, particularly for pedestrians. These two existing light fixtures are pedestrian-scale fixtures, with mounting heights of 14' above grade, and would be significantly obstructed by the canopy of trees in these islands.

The close distance between these potential trees and the existing pedestrian lights would be too small to prune tree branches in a way that promotes tree health yet does not obscure the intended site lighting. Because these islands are not large, there is not enough room to move the trees and avoid conflicts with the existing lights. For reference, I've also included the corresponding area of the proposed lighting plan depicting the light distribution in this area (see Figure 2 below).

Safety for employees and residents affects site lighting design, and among the concerns are general security, safe pedestrian navigation of the site during all types of weather (i.e., snowy or icy conditions), and helping avoid collisions between pedestrians and vehicles. While trees planted in these two locations would have contributed to the City's parking area shading requirements, due to the safety concerns and the conflicts that would occur if trees were planted (even if eventually pruned), I do not recommend installing trees in these islands.

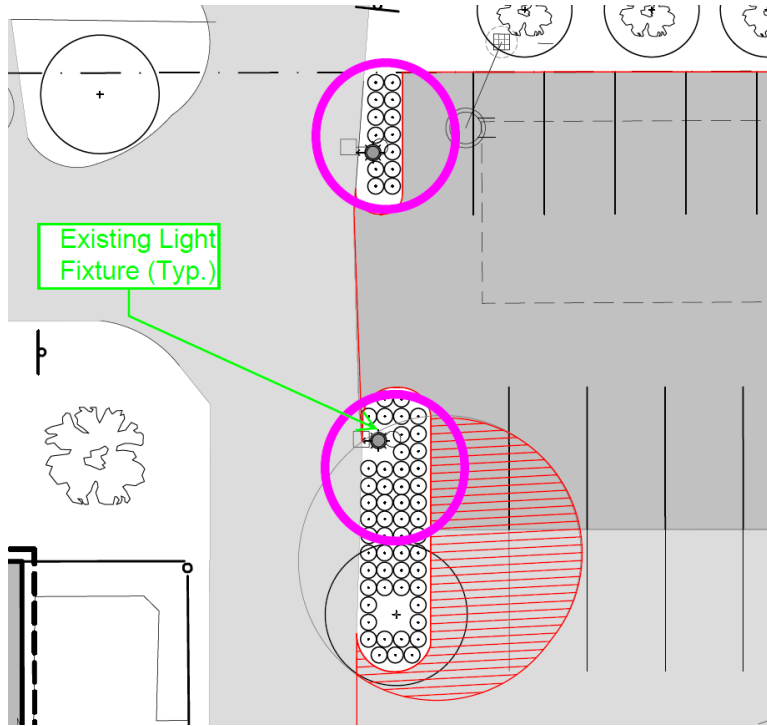


Figure 1 – Placing trees in the islands (magenta) will obscure the existing site lighting at the time of installation as well as in the future, which creates an unsafe condition for navigating the site after sunset, particularly for pedestrians. These trees would have contributed to the City’s parking area shading requirements. See Sheet L-101 for the full landscape plan.

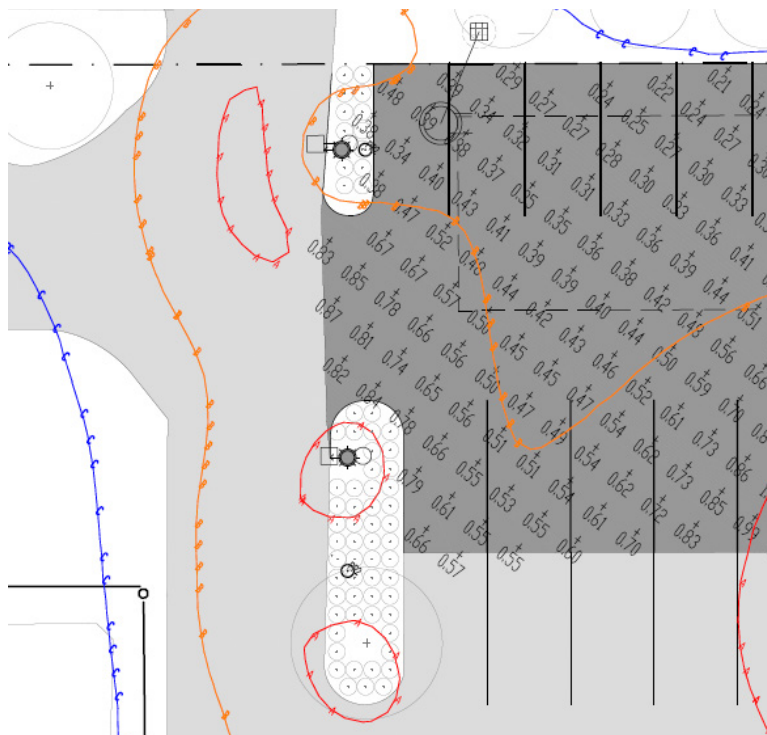


Figure 2 – Light distribution of the existing fixtures provides light along the access road and parking areas. See Sheet L-102 for the full site lighting plan.