



## METHOD OF RIPARIAN BUFFER DESIGN

DATED: 09-09-2021

W5D93d -Big Tree Road and Parker Road projects, Town of Hamburg

Earth Dimensions, Inc. (EDI) designed the riparian buffer for the Big Tree and Parker Road developments based on an “Urban Buffer” approach. This is not a documented method however it has been successfully approved and implemented on other projects as part of stream enhancement and mitigation, under the USACE (United States Army Corps of Engineers) and NYSDEC (New York State Department of Environmental Conservation). In addition, two documents by NYSDEC were consulted for the design of this plan. They include: “Riparian Buffers- NYS Dept. of Environmental Conservation”

([https://www.dec.ny.gov/docs/lands\\_forests\\_pdf/t4tbuffersfs.pdf](https://www.dec.ny.gov/docs/lands_forests_pdf/t4tbuffersfs.pdf)) and “Stream Buffers- A Tool for Watershed Protection- NYS Dept. of Environmental Conservation”

(<https://www.dec.ny.gov/chemical/106345.html>). Under this design concept, trees and/or shrubs are densely planted along areas of the channel and a buffer is set on each side of the channel that will be seeded with a Native seed mix.

Streams adjacent to development typically are subject to degradation from adjacent land uses. EDI designed the proposed buffer to have three layers of vegetative protection (tree layer, shrub layer and herbaceous layer). In addition, a native wildflower and grass mix will be utilized in the stream buffer. The stream channel is approximately 4 feet wide. A buffer area was implemented demarcating a 25 foot corridor on each side of the stream (wherever possible). The main objectives of this buffer plan are to protect the stream channel, trap sediments, pollutants and runoff, provide shade to the channel and stabilize the soils to prevent erosion. Densely planted trees and shrubs tend to deter human use. The tree and shrub species and seed mix selected are also utilized to increase diversity as well as aesthetic appeal to adjacent neighbors. The intent is that the buffer area is not to be mowed to allow the trees, shrubs and herbaceous layer to flourish.