

STONEFIELD

Sustainability Memorandum

TO: Township of West Orange Planning Board

FROM: Stonefield Engineering & Design, LLC

RE: Green Essex Partners Urban Renewal Entity, LLC
Proposed Multi-Family Residential Development
100-300 Executive Drive
Township of West Orange, Essex County, New Jersey

DATE: May 8, 2020

Overview

Green Essex Partners Urban Renewal Entity, LLC is proposing to redevelop Block 155, Lots 40.02, 42.01, & 42.02 (herein referred to as the “project site”) to accommodate three multi-family residential buildings (425 units total), a parking garage (570 spaces), and an amenity area for residents. Additional improvements include off-street parking lots, stormwater management improvements, lighting, and landscaping. This Memorandum has been prepared to describe the sustainability measures provided by the proposed development, in accordance with the Essex Green-Executive Drive Redevelopment Plan, dated May 1, 2019 and the Township of West Orange Sustainability Plan Element, adopted in the 2010 Master Plan Update.

Preservation of Environmentally Sensitive Areas

The project site has two unnamed ditches, one which traverses the center of the project site and the other straddles the northerly property line. Through a Flood Hazard Area Applicability Determination, it has been confirmed that both ditches are regulated and subject to a 50FT riparian buffer. Additionally, two freshwater wetland / State Open Water areas are located immediately adjacent to both ditches per a Letter of Interpretation from NJDEP; the easterly portion of wetlands is subject to a 50FT transition area buffer. The other has been classified as an ordinary resource wetland with no associated transition area. To preserve these areas, the proposed development has been designed around the unnamed ditch and pond, with no permanent features proposed within, except for one road crossing.

Steep Slopes

The project site area is currently developed as an office complex. As the existing grade varies greatly from east to west, several retaining walls and steep slopes exist within the project site area. However, it is worth noting that most of these areas are not naturally occurring and were created as part of the office development, when the steep slopes were originally disturbed. As shown on the “Proposed Environmental Constraints Plan” prepared by Stonefield Engineering and Design, LLC, last revised May 8, 2020, the existing steep slopes generally follow the shape of the existing development and are mostly limited to landscape islands. Given that the steep slope areas are generally not concentrated and spread out throughout, it would not be feasible or practical to avoid all these areas. The proposed development limits disturbance within the naturally occurring steep slope areas, including the areas along the easterly property line and directly along the unnamed tributary.



Landscaping

The landscape is designed primarily with native plants in drifts and clusters as they might naturally occur in their environment. Several intimate courtyards and lawn spaces have been provided along with a series of plantings forming a natural border that blends the more structured landscape with the existing forest and wetlands on site. The project introduces over 200 trees which over time will form a new canopy over the site. The design also avoids a large forested area on site that will be preserved and replanted with native trees and shrubs in order to avoid the takeover of unwanted invasive species. Rain gardens have been designed in several locations to assist in ground water infiltration while also providing aesthetically pleasing backdrop for the new development. The majority of landscape is designed to be low maintenance and highly draught tolerant.

Stormwater Management

The proposed development has an extensive stormwater management plan which complies with all applicable stormwater management regulations and standards. Some of the sustainable elements proposed include the reduction of impervious surfaces, bio-swaes within the parking area, rain gardens, and an underground detention basin to reduce peak flow rates.

Green Building Standards

The proposed buildings have been designed with the following sustainable elements:

1. (6) Electric Charging Stations
2. Energy Star Appliances and Fixtures
3. Water Use Efficient Appliances and Fixtures
4. LED Light Fixtures
5. White Low Albedo Roofing Materials

Zachary E. Chaplin, PE
Stonefield Engineering and Design