



Environmental Protection Board
Permit Application

PROJECT ADDRESS	0 South Brook Drive Lot 13
TAX ID	004-0002
ZONING	RA-3
ACREAGE	2.027 Acres

PROJECT NARRATIVE

The project site is located on the west side of South Brook Drive and is approximately 2.027 acres in size and within the RA-3 zone. The property was created via Subdivision in 1987 as shown on map #11720 recorded in the Stamford Land Records. The lot has remained undeveloped since its creation. The wooded lot contains an onsite brook, and its associated wetland area located in the northwest (Flagged by James McManus, Certified Soil Scientist, in January 2024). The on-site brook runs through the property starting at the concrete headwall in the northern portion of the property to the southern corner of the property. Connected to a larger system of waterways, the brook eventually discharges into the Mianus reservoir, located west of the project site.

Our proposed project is to develop the lot by constructing a main residence with a connected garage, driveway, plunge pool, septic system, walkways, drainage improvements, grading, and other associated site work. The closest activity to the flagged wetland boundary is the proposed level spreader, which is expected to be approximately 12 feet away. There are seventeen (17) trees DBH 6" + proposed to be removed within the setback due to the proposed site work. As a method to minimize any erosion or sedimentation near the wetlands during construction, we are proposing a double row of silt fencing around the area of work. Many design choices were made specifically to reduce potential impact or disturbance to the regulated resources. The downslope wetlands are expected to be protected from the proposed development by a double layer of silt fencing, running along the construction area and the wetland boundaries.

BIOLOGICAL NARRATIVE

The property at 0 South Brook Drive Lot 13 is currently a vacant wooded lot. The property is surrounded by residential development and backs up to the Mianus Reservoir. There are mature trees throughout the entire 2+ acre property. There is one (1) wetland area on site, where the soils are identified as poor to very poorly drained Ridgebury, Leicester, Whitman, soil

series by James McManus (Certified Soil Scientist, JMM Wetland Consulting Services, LLC) in January 2024.

The upland review area on the property is currently an unkempt wooded area. The vegetation on the property consists of mature shade trees including several large oak, hemlock, black and yellow birch, beech, and tulip as well as low-story trees and shrubs such as spicebush and witch hazel, and ground cover including Christmas ferns and sparse patches of grass. There is potential for wildlife habitat on site, in the wetland and in the upland review area. Some of the species spotted on site include squirrels, and small birds such as cardinals, robins, and crows. The upland review area is currently a vacant wooded area, providing potential for native species to use as a habitat. There was leaf litter on the ground throughout the entire site which native species could potentially use to make their nests in the wetland area. The potential for freshwater habitat and water-based recreation is moderate since there is a shallow perennial brook that runs from the northeast portion to southwest portion of the property.

DESIGN CONSIDERATIONS AND ALTERNATIVE PLANS:

The property of 0 South Brook Drive, Lot #13 is 2.027 acres. After considering wetlands, watercourses, open space reserve area, and both wetlands and zoning setbacks, there is approximately 4,000 sq.ft. remaining for development, which equates to 4.5% of the total lot area. As such, this area was utilized for the siting of the main residence. The remaining development and site work was centralized and tightened around the proposed residence to increase distance from and reduce any chance of adverse impact to the regulated resources.

During the design process, we explored two main locations for the septic system and drainage structure. We explored locating one of structures near DT-6 and DT-7, and the other near DT-1 and DT-2. The results of the Deep Tests as well as determination of possible site impacts solidified the proposed locations. DT-6 and DT-7 were found to be more favorable with respect to restrictive layers, whereas DT-1 and DT-2 were less favorable and would require more earthwork to meet code. Siting the septic system near the rear of the residence was found to require regrading, fill, tree removals within the wetland setback, and moving the proposed retaining wall further downslope. Ultimately, this would have created more site disturbance in closer proximity to the wetland. Upon reviewing the impacts of the drainage structure in the same location, it was found to require much less earthwork, and allowed the retaining wall immediately downslope, thus increasing the distance to wetlands.

Another design alternative related to the proposed finished elevation of the residence. Originally, the entire residence was designed to have the garage, family room, and bedrooms at the same elevation of 105. This is a typical design practice and desired layout for most homeowners. After preliminary review, this design would have resulted in grading as well as earthwork to result in the desired elevation. An alternative considered and ultimately implemented into the final design was to revise the elevations of the western two modules (bedrooms and family room). This allowed for a reduction in the amount of cut and fill required and was possible by implementing stairs between the modules.

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