

PROJECT NARRATIVE

FOR

SHORELINE PROPERTIES, INC.

A Proposed Major Subdivision

LOCATED AT

66 Fairview Avenue
Hopkinton, Rhode Island

HOPKINTON ASSESSOR'S MAP 18, LOT 7K

PREPARED BY

American Engineering, Inc.

November 6, 2020

INTRODUCTION

Shoreline Properties, Inc. is proposing to subdivide its existing lot of record to create four lots with seven dwelling units comprised of three duplexes and one single family dwelling. The population of the new lots is estimated to be 17 persons with an estimated 4 school aged children. The project is defined as a Major Subdivision to create a residential Cluster Development. The site consists of Tax Assessor's Map 18, Lot 7K, which contains 13.23 acres of land in an RFR-80 Zone.

EXISTING CONDITIONS

The project is bounded westerly by Fairview Avenue. The bulk of the property is wooded with the exception of the existing duplex, gravel driveways, and previously cleared areas as shown on the plan. There are wetland areas in the easterly portion of the site.

There are no registered historic or archaeological areas on site, but Witch Rock, as it is locally known, is located in the easterly portion of the proposed open space. There are no areas of agricultural use on this property. The soil types in the area of the proposed development are not considered "Prime Farmland".

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM Map Number's = 44009C0064 J, Effective Date = April 3, 2020) indicates that the site falls within a Zone "X" -Unshaded (an area of minimal chance flooding).

Site Soils:

Soils located on site include the following:

CaC - Canton-Charlton-Rock outcrop complex, 8 to 15 percent slopes. SHWT greater than 6' and flooding is not a concern.

This complex consists of gently sloping to moderately sloping, well drained soils intermingled with areas of bare, hard exposed bedrock. The complex is on side slopes and crests of upland hills and ridges. Stones and boulders cover 10 to 35 percent of the surface. Areas are irregular in shape and mostly range from 5 to 40 acres. The complex is approximately 40 percent Canton soils, 20 percent Charlton soils, 20 percent rock outcrops, and 20 percent other soils. The soils and out crops are so intermingled that it was not practical to map them separately. Typically, the Canton soils have a surface layer of very dark grayish brown fine sandy loam about 3 inches thick. The subsoil is dark yellowish brown, yellowish-brown, and light olive brown fine sandy loam 19 inches thick. The substratum is olive gray and light olive gray gravelly loamy sand to a depth of 60 inches or more. Typically, the Charlton soils have a surface layer of very dark brown fine sandy loam about 2 inches thick. The subsoil is 25 inches thick. The upper 15 inches is dark yellowish brown fine sandy loam, and the lower 10 inches is yellowish brown gravelly sandy loam. The sub stratum is light brownish gray gravelly sandy loam to a depth of 60 inches or more. Included with these soils in mapping are small areas of somewhat excessively drained Gloucester soils, well drained Paxton and Narragansett soils, and moderately well drained Sutton soils. Also included are small areas of soils that have slopes of more than 15 percent and small areas of soils with bedrock at a depth of less than 40 inches. The permeability of the Canton soils is moderately rapid in the surface layer and subsoil and

rapid in the substratum. Available water capacity is moderate, and runoff is medium. This soil is extremely acid through strongly acid. The permeability of the Charlton soils is moderate to moderately rapid. Available water capacity is moderate, and runoff is medium. This soil is very strongly acid through medium acid. This complex is suitable for community development but is limited by the stony surface and rock outcrops. Onsite sewage disposal systems need careful design and installation to prevent effluent from seeping to the surface, and rock outcrops make excavation difficult. Removal of stones and boulders is necessary for landscaping. The use of straw bale sediment barriers, siltation basins, and mulch and quickly establishing plant cover help to control erosion during construction. Most areas of these soils are in woodland. The complex is suited to trees, but stoniness and rock outcrops hinder the use of equipment. The stony surface and rock outcrops make this complex unsuitable for cultivated crops and the use of farming equipment impractical. This complex is suitable for woodland wildlife habitat. Stoniness and rock outcrops limit the suitability for open-land wildlife habitat. The soils are too dry to provide wetland wildlife habitat. Capability subclass VII_s; wood land group 4x.

CaD - Canton-Charlton-Rock outcrop complex, 15 to 35 percent slopes. SHWT greater than 6' and flooding is not a concern.

This complex consists of moderately steep to very steep, well drained soils intermingled with areas of bare, hard exposed bedrock. The complex is on side slopes of upland hills and ridges. Stones and boulders cover 10 to 35 percent of the surface. Areas are irregular in shape and mostly range from 5 to 50 acres. The complex is approximately 40 percent Canton soils, 20 percent Charlton soils, 20 percent rock outcrops, and 20 percent other soils. The soils and rock outcrops are so intermingled that it was not practical to map them separately. Typically, the Canton soils have a surface layer of very dark grayish brown fine sandy loam about 3 inches thick. The subsoil is dark yellowish brown, yellowish brown and light olive brown fine sandy loam 19 inches thick. The substratum is olive gray and light olive gray gravelly loamy sand to a depth of 6 inches or more. Typically, the Charlton soils have a surface layer of very dark brown fine sandy loam about 2 inches thick. The subsoil is 25 inches thick. The upper 15 inches is dark yellowish brown fine sandy loam, and the lower 10 inches is yellowish brown gravelly sandy loam. The substratum is light brownish gray gravelly sandy loam to a depth of 60 inches or more. Included with these soils in mapping are small areas of somewhat excessively drained Gloucester soils, well drained Paxton and Narragansett soils, and moderately well drained Sutton soils. Also included are small areas of soils that have slopes of less than 15 percent and small areas of soils with bedrock at a depth of less than 40 inches. The permeability of the Canton soils is moderately rapid in the surface layer and subsoil and rapid in the substratum. Available water capacity is moderate, and runoff is rapid. This soil is extremely acid through strongly acid. The permeability of the Charlton soils is moderate to moderately rapid. Available water capacity is moderate, and runoff is rapid. This soil is very strongly acid through medium acid. The steep slopes, the stony surface, and rock outcrops make this complex poorly suited to community development. Onsite septic systems require special design and installation to prevent effluent from seeping to the surface, and rock outcrops make excavation difficult. The use of diversions, mulching, and quickly establishing plant cover help to control erosion during construction. Although this complex is poorly suited to trees, most areas are in woodland, and the soils are better suited to woodland than to most other uses. The main limitations are the steep slopes, stony surface, and rock outcrops, all of which limit the use of equipment. Logging roads and trails require careful layout to prevent erosion. These soils are not suited to cultivated crops. Stones, boulders, and rock outcrops make the use of farming equipment impractical. The hazard of erosion is severe. This complex is suitable for woodland wildlife habitat. Stoniness and rock outcrops make the use of the soils for open land wildlife habitat impractical. The soils are too dry to provide wetland wildlife

habitat. Capability sub class VIIs; woodland group 4x.

PROPOSED USES

Shoreline Properties, Inc. is proposing to subdivide its existing lot of record creating four lots with seven dwelling units comprised of three duplexes and one single family dwelling. The site consists of Tax Assessor's Map 18, Lot 7K, which contains 13.23 acres of land in an RFR-80 Zone. The proposed development would be consistent with other properties in the area with residential dwellings serviced by an OWTS and private well. This project has been designed to maintain the maximum amount of contiguous undisturbed natural areas while reducing the potential impact to abutting properties. House and septic locations will be situated to preserve any significant vegetative stands where practical. The Onsite Wastewater Treatment Systems (OWTS) will be designed to meet or exceed all state-imposed regulations. The soils on site are suitable for the use of on-site septic systems with individual wells. Most of the water drawn from the individual wells is returned to the groundwater via the OWTS. At the density proposed, there is no reason to believe that there will be any significant adverse impact to either the surface water quality or the groundwater quality and quantity. The population of the new lots is estimated to be 17 persons with an estimated 4 school aged children.

Crossman Engineering performed a peer review of the project. We have submitted their letter as part of this submission.

Shoreline Properties, Inc. is requesting to reduce the required 100-foot open space buffer to 30 feet in the area south of Parcels 1, 2 and 3, north of Parcel 4 and north of the proposed right-of-way. We are proposing an additional 40' no-cut restriction along the southerly boundaries of Parcels 1, 2 and 3 and the northern boundary of lot 4. This no-cut restriction will provide an overall buffer of 70' along the southern boundary of lots 1,2, and 3 and the northern boundary of lot 4. The proposed private right-of-way generally follows the layout of the existing gravel driveway that was installed by the prior owner of the parcel. By utilizing the proposed layout, the extent of clearing required is greatly reduced. Reducing the open space buffer in the area of the parcels keeps the majority of the development away from the wetland areas and maintains the integrity of the undisturbed woodlands in the easterly portion of the lot. In addition, the open space provided by this project is 6.99 acres or (52.8%) while the required open space area is 3.30 acres or (30%). Also, the area of the open space plus the no-cut areas on the lots is 7.93 acres or (60.0%). It is our view that the proposed cluster development layout with the requested open space buffer reduction is the best choice for the development of this parcel.