

41 Chestnut Street | Statement of Intent

Town of Wellesley Large House Review

July 16, 2021

Introduction

The subject property is located at 41 Chestnut Street in the east-central portion of the Town of Wellesley, in the Single Residence 20 District. This lot is surrounded by developed residential lots on all sides, and is bounded by Chestnut Street to the southwest.

The property has an area of approximately 73,500 SF (~1.69 acres), which at present contains a two-and-a-half-story house with a partially walk-out basement, a detached one-and-a-half story three-stall garage with a walk-out basement, and landscape and hardscape areas, including a horseshoe driveway. We propose the razing of the existing structures on the site, and the construction of a two-story house with a partial walk-out basement, two attached two-stall garages, a rear terrace, and a detached open pavilion, along with improved landscape and hardscape areas.

1. Preservation of Landscape

The property is 1.69 acres in size. The existing residence sits atop a plateau in the middle of the site. The topography slopes down on all sides toward the abutting properties and the street. It appears the grade was artificially built up, as fill materials are present to a significant depth around the residence. At the rear of the house, the grade is lower, which creates a walkout condition on the north side of the house. There are landscape walls around the residence which help retain the built-up topography. At the northern corner of the lot, there is a pre-existing non-conforming 1-1/2 story three car garage which has a walkout basement facing the abutting properties, and which encroaches into the building setback.

The front yard can be characterized as a maintained residential property consisting of an asphalt loop driveway and associated walkways, stairs, walls, and landscape features. The landscape plantings at the front of the property are minimal and primarily dress the foundation of the house. The property is very open to the street with only three notable trees existing in the lawn between the front of the house and the street, one of which is an invasive Norway Maple. There is a prominent existing ledge outcrop located in the

front lawn near the western driveway entrance. Except for the street frontage, there is a wooded buffer on all sides of the property, consisting primarily of deciduous canopy trees. The wooded areas of the site have not been well maintained, and many of the trees are either invasive Norway Maples, or are in poor health. At the rear of the residence, there is a formal ornamental garden which is ringed by a hemlock hedge. There are mature hemlocks located along the southeastern property boundary which provide some privacy to and from the abutting property. A masonry fireplace is located in the woods on the northeast property boundary, which is in disrepair. A 6' height retaining wall is also located on the northeastern end of the formal garden and presents to the abutting property. In general, the property has suffered from a lack of maintenance, which has resulted in overgrown plantings, colonization of invasive species, and crumbling hardscape.

Proposed landscape improvements at the front of the property will include grading and the installation of a driveway. The existing ledge outcrop will be preserved. A single 3' height address pier will be located at each driveway entry. The proposed driveway will closely resemble the existing loop driveway but will include additional space at the front door for guests and service vehicles to drop off and park. Like the existing garage layout, the proposed garages will be located on the northwest side of the house but will be attached to the residence and will be located well within the building setbacks. The parking court at the garages is sized to allow for vehicular circulation but does not provide for much additional parking. A retaining wall will be located on the western side of the parking court to retain the grade. The wall will be 5' high at its highest point and will be constructed of concrete with a stucco finish and natural stone cap. The proposed wall respects the 20' building setback while providing space for a vegetated buffer.

The large existing 36" Red Oak will be preserved at the front of the property to maintain the character along the street. New screen plantings of spruce and arborvitae will be planted along the side and rear property lines. The screen trees will be faced-off with dogwood trees and shrub plantings including rhododendron, hydrangea, viburnum, boxwood, and ground cover. Two new oak trees are proposed in the front yard to build upon the existing street character. Foundation plantings will consist primarily of boxwood, dogwood, juniper, yew, azalea, hydrangea, magnolia trees, and groundcover. The broad lawn, sense of openness, and selectively preserved canopy trees with additional proposed canopy and flowering trees will be in keeping with the character of the existing property and other properties in the area. The garage at the side of the proposed home will be accessed via the driveway, which will be partially screened from the street with plantings.

Proposed improvements at the rear of the home will consist of grading to provide a level lawn, sport court and associated fences, pavilion, and paving which will allow the family reasonable use of their property. Like the existing condition, the proposed grade slopes from the parking court down at the north end of the house to a walkout from the basement. The grade then slopes back up to the rear lawn which is at approximately the same elevation as the existing formal lawn. We are proposing a sunken garden on the east end of the residence with a walkout from the basement. This space is created with retaining walls and includes a hot tub and staircase up to a terrace off the back of the residence with lawn stairs out to the play lawn. The sunken terrace will be out of view from the neighboring property, and the wall extends up above grade on the top to provide a physical barrier in the planting beds above. The retaining walls at both walkout locations will be concrete clad with white limewashed brick and a natural stone cap. Stone terraces off the rear of the house will provide for recreational activities. We propose to fence the rear lawn with a 4' black wire or chain link fence for the kids and dog. There will be gates located on either end of the house for accessing the rear yard. A pavilion and a sport court are proposed in the Northeast corner of the property. The sport court is designed as a half-court basketball and pickleball court. The court will consist of asphalt with a painted acrylic surface similar to a tennis court. Screen trees will be planted on all sides facing abutters.

Proposed grading and construction activity will result in tree removal, but we are proposing a generous planting of large trees to offset the removals, and we have preserved a substantial buffer of existing trees throughout the site. Proposed plantings include evergreen screening trees at the perimeter of the property to provide privacy for neighboring properties, as well as canopy trees, flowering trees, and evergreen and deciduous shrubs. A total of 76 existing trees will be preserved with a total DBH of (1,047"). The total DBH of proposed tree removals is (635"). This includes (101") of invasive species and (82") of trees in poor health. We are proposing to plant 91 new trees which will replace a total of (350.5").

2. Scale of Buildings

The proposed house is well within all allowable setbacks on the lot, which corrects the existing-nonconforming nature of the current detached garage. The residence is proposed to be clad in white limewashed brick and white stucco, with accents of lead-coated copper. The roof is proposed to be weathered cedar shingles of a mid-grey tone. These materials find precedent in a number of other homes in the neighborhood and throughout the Town of Wellesley. Aesthetically, the proposed residence will be suitable to the neighborhood and enhance its surroundings. The use of brick and stucco is suitable to the architectural style of the house and the neighborhood; materials and style

are traditionally informed to be in keeping with Wellesley's character. A variety of wood casement windows, painted black, reflect the style of the proposed building and are rooted in tradition, while horizontal muntins lend a somewhat more contemporary character.

The overall mass of the proposed house is broken up into smaller forms to bring down the scale and establish a rhythm. The main mass of the house is centrally located, with a smaller perpendicular gable protruding from its center. This emphasizes the front door and begins to break down the mass of the house with smaller forms. Additional smaller gables and setbacks in the façade all work to bring down the scale of the building. The four gables on the front of the house are to be clad in brick, with secondary façade surfaces clad in stucco, establishing the hierarchy not only in height, but also in material. The sport court has been strategically placed at the rear of the building and partially below grade to minimize its height and visibility. Two of the garage doors face northwest to avoid visibility from the street; the other two face southwest toward the street but are screened by trees and shrubbery, as well as the topography of the site. Thoughtful placement of landscape elements aid in the screening of the mass from neighboring properties and from the street.

The highest proposed ridge height is 31'-5" from existing average grade and 34'-10" from proposed average grade (grade is to be reduced slightly), which is 14" below the maximum height limit. The existing house in and of itself is nearly 3' taller than the proposed, and also sits on a higher grade height as well as a built-up landscaping bed. Grading interventions as well as a shorter house result in the proposed house's highest ridge being 6'-1" lower than the highest ridge of the existing house.

Even though the proposed house's TLAG will increase by 3,036 square feet (27%) from the existing house, the green practices implemented during the construction process will significantly reduce the electric consumption and carbon footprint. Interventions include a tighter building envelope, LED fixtures, a VRF mechanical system, and reduced exterior mechanical equipment. All exterior mechanical equipment will be hidden behind the rear garage, and screened from rear neighbors' view with plantings and a low stone wall.

3. a) Architectural Lighting

All architectural exterior lighting has been kept to a minimum. As required by code, sconces are located adjacent to all exits, which also compliment the architecture. Overhead lights are proposed at the rear covered porch and the sport pavilion. All proposed lighting is Dark Sky compliant.

Floodlights installed at the eave line will be used in emergency situations only and are not motion-sensitive; as such, they will be illuminated only very rarely.

b) Landscape Lighting

Proposed landscape lighting has been designed to provide safe navigation of the property after dark. Fixtures have been selected and located to avoid light trespass onto neighboring properties. Path lighting along walkways and stairs consists of downward pointing fixtures with low wattage bulbs and is designed to allow safe nighttime movement on the property. All landscape lighting fixtures are downward facing and have been specified to provide the proper equipment to control glare and be Dark Sky compliant. Per the provided photometric plan, there will be no light trespass onto abutting properties or the right of way.

4. Open Space

The proposed house and garage are sited toward the center of the lot. The main architectural volume of the home will be set back approximately 81' from the front property boundary, exceeding the required setback per the 500' rule. This will preserve the open space and broad lawn at the front of the property. The east side of the home is set back approximately 69' from the property line, and well outside the 20' setback. The one-story garage on the west side of the home is approximately 43' from the property line, and the home is approximately 74' from the property line on the North end of the house. The generous setbacks allow for the preservation of existing tree canopy, and the planting of a substantial buffer. The home will be oriented roughly parallel to Chestnut Street, with open space presenting to the street with lawn area and the preservation of a significant tree as well as proposed canopy trees, evergreen trees, flowering trees, shrubs and perennials to enhance the property and maintain consistency with the character of adjacent properties.

5. Drainage

The development shall incorporate measures that are adequate to prevent pollution of surface or groundwater, to minimize erosion and sedimentation, and to prevent changes to groundwater levels, increased rates of runoff, and minimize potential for flooding. Drainage shall be designed so that groundwater recharge is maximized, and so that the rate of runoff shall not be increased at the project boundaries.

There are presently no stormwater controls in place on the site to manage stormwater runoff in the existing condition. Runoff flows off the site onto abutting properties and streets. The project will have a robust proposed stormwater management system to

capture, store and recharge runoff generated by the proposed house's roof, driveway, parking court, sports court, and rear terrace. The proposed stormwater management system will significantly increase the amount of runoff being recharged on the site, thereby reducing the rates and volumes runoff flowing off the site for all storm events.

The proposed stormwater management system will consist of a network of downspouts, pipes, structures, and three subsurface infiltration systems to capture, route, store, and recharge runoff from proposed impervious areas. Proposed subsurface infiltration system 1 is located under the driveway north of the proposed house and will store and recharge runoff from proposed driveway and roof surfaces. Proposed subsurface infiltration system 2 is located under the lawn area north of the proposed house and will store and recharge runoff from the proposed roof surface and rear terrace. Proposed subsurface infiltration system 3 is located in the front yard, south of the arrival court, and will store and recharge runoff from the proposed sports court.

The proposed stormwater management system will significantly reduce the rates and volumes of runoff leaving the site for all storm events. Tables One and Two below show the reductions in rates and volumes of runoff leaving the project site.

Table One: Comparison of Total Pre- and Post-Development Peak Runoff Rates Leaving the Project Site

| | 2-year storm | 10-year storm | 25-year storm | 100-year storm |
|-----------------------|---------------------|----------------------|----------------------|-----------------------|
| Total Existing | 0.98 CFS | 3.05 CFS | 4.57 CFS | 7.09 CFS |
| Total Proposed | 0.36 CFS | 1.51 CFS | 2.40 CFS | 3.93 CFS |
| Difference | -0.62 CFS | -0.21 CFS | -0.54 CFS | -0.79 CFS |
| Difference | -63.3% | -50.5% | -51.4% | -44.6% |

Table Two: Comparison of Total Pre- and Post-Development Runoff Volumes Leaving the Project Site

| | 2-year storm | 10-year storm | 25-year storm | 100-year storm |
|-----------------------|---------------------|----------------------|----------------------|-----------------------|
| Total Existing | 3,985 CF | 10,545 CF | 15,421 CF | 23,643 CF |
| Total Proposed | 1,896 CF | 5,675 CF | 8,762 CF | 15,731 CF |
| Difference | -214 CF | -1,794 CF | -1,112 CF | -5,571 CF |
| Difference | -52.4% | -46.2% | -43.2% | -33.5.5% |

Tables One and Two, shown above, clearly demonstrate that the project will significantly reduce rates and volumes of runoff leaving the site while providing significant increase in stormwater recharge on site. An Operation and Maintenance Plan has been prepared to outline the maintenance intervals and procedures for the components of the stormwater management system.

6. Circulation

The arrival sequence for the proposed design consists of a horseshoe asphalt drive, edged and accented with stone, and will reuse existing curb cuts at the south and east corners of the property. The drive will provide access for the residents, visitors, and service vehicles. A rectangular, paved arrival court will be placed along the middle of the loop, with stone steps centered on the front door. An additional driveway spur, at the northern end of the loop, leads to a private parking court at the garages. Access to the rear yard is provided by proposed lawn paths, from both the parking court at the northwest and the southeast side yard. Rear terraces are connected to the yard by lawn steps.

