



Places Associates, Inc.

Planning, Landscape Architecture, Civil Engineering and Surveying
Certified WBE

January 23, 2017

Boxborough Planning Board
29 Middle Road,
Boxborough Ma 01719

Re: **Site Plan Review**
Regency at Boxborough
Project No. 5249

Dear Board Members:

This office has reviewed the submission for the above referenced project. The following items were received:

1. Application for Site Plan Approval, Regency at Boxborough, prepared by Stamski and McNary Inc., dated December 22, 2016.
2. Stormwater Management Report, Regency at Boxborough, prepared by Stamski and McNary Inc., dated December 22, 2016.
3. Stormwater Operations and Maintenance Manual, Regency at Boxborough, prepared by Stamski and McNary Inc., dated December 22, 2016.
4. Site Plan for Regency at Boxborough sheets 1-30, prepared by Stamski and McNary Inc., dated December 22, 2016.
5. Building Elevation Plans, Regency at Boxborough sheets 1-5, prepared by Toll Architecture, dated December 21, 2016. (*Not reviewed by this office.*)
6. Landscape Plan, Regency at Boxborough sheets 1-8, prepared by ESE Consultants Inc., dated 12-22-16.

These items have been reviewed for compliance with the *Town of Boxborough Zoning Bylaw (2012)*, the *Town of Boxborough Site Plan Approval Rules and Regulations (2011)*, *MADEP Stormwater Management Standards* and standard engineering practices.

At this time we have the following comments and concerns:

Zoning- based on the 2012 By-law:

1. Under the 2012 Zoning By-law, Section 4400, Two-family dwellings Reserved Exclusively for Elderly Occupation requires a Special Permit from the Planning Board. This Special Permit application does not appear to have been included in this submittal.
2. The applicant should show provisions for screening and landscape buffers around the project, particularly behind units 8-10,2 , 6-36 and the clubhouse. (Zoning 4400 – 9)
3. The applicant should provide the gross floor area for the clubhouse and the typical units. (Zoning 5002 footnote 5)
4. The parking spaces should be dimensioned on the plan and construction details should be provided for handicap spaces, ramps and crosswalks to ensure compliance with ADA

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- requirements. Note 2 on sheet 27 should be revised. The pedestrian access should not “generally comply” with the ADA requirements, it must fully comply.(Zoning 6004)
5. Parking space calculations should be listed on the plan. (Zoning 6006)
 6. A loading area should be provided for the Clubhouse if the building exceeds 5,000sq.ft.(Zoning 6007).
 7. All signs must be in compliance with *Zoning Section 6300*.
 8. A portion of the proposed sidewalk along Route 111 will be located within the 100’ buffer to the W-district and may require a Special Permit under *Zoning Section 7104 – g, or approval under Zoning section 7200*.

Site Plan Regulations:

9. The total area of buildings in square feet should be added to the plans. (Site 3.1-3)
10. The landscape plan needs to show provisions for screening the abutting properties.(Site 3.1-5)
11. Details should be added to the plans for all signs and posts, i.e. stop signs, dead-end sign, etc.(Site 3.1-6)
12. The location of any proposed open space should be added to the plan, will individual units have exclusive use areas?(Site 3.1-8)
13. The application references a traffic report by Bayside Engineering, this office did not receive a copy of this report and therefore cannot comment on traffic or site distances at this time. (Site Plan 3.1-14) Depending on the extent of the analysis the Board may wish to have the report reviewed by a Licensed Professional Traffic Engineer.
14. The applicant should address the requirement for bicycle parking, (Site 4.1-6)
15. Landscape (Site 4.4) – See comments below
16. Solid waste storage (dumpster) and a loading area have not been provided at the Clubhouse building. These areas will require screening.(Site 4.4-3)
17. The applicant should address *Site Plan Regulation Section 4.4-5* which requires that the use of bituminous paving should be minimized in favor of paving stones, bricks, etc. It may be possible to integrate these alternatives in the clubhouse area.
18. This office did not receive photographs, narratives or tree protection plans or related information addressing *Site Plan Section 4.5 Route 111 View and Tree Protection*.
19. The applicant is proposing a sidewalk from the site entrance along Route 111, towards Stow Road. It is unclear from the plans where the proposed sidewalk ends and if a handicap ramp and crosswalk are proposed at Stow Road. The sidewalk should also be extended to the west to the property line to allow future connections. Route 111 in this section has a low profile berm. Typically a vertical granite or vertical concrete berm is utilized adjacent to a sidewalk to protect pedestrians from vehicles leaving the roadway. This office recommends that the sidewalk be placed as far from the roadway as feasible, and in areas where the grass strip is six feet or less, provide a guardrail to protect pedestrians.(Site 4.7).
20. The applicant should address *Site Plan Regulation Section 4.16 Fire Safety and Protection* and review site access and access to the Clubhouse with the Boxborough Fire Department.
21. A construction detail showing how the sidewalk crosses a driveway without ramps and the relation to the roadway elevation should be provided.

Stormwater:

22. The stormwater report narrative section indicates that the site is not tributary to a critical area, Standard 6, this is incorrect. Standard 6 includes Interim Well Protection areas as “critical

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- areas” and therefore the site must be designed in accordance to table CA 3, page 19 of SWM Volume 1 Chapter 1. Although it appears that later in the report this has been corrected.
23. The area around Drop Inlet 2 (Drive A, Sta 6+70+) should be modeled as a pond and inlet grate capacity reviewed to determine if ponding will extend onto the abutting property. Two other areas graded as ponds are not modeled. (Drive A, sta 21+00 and between units 21 and 22) If they are not needed, it is recommended that they be eliminated and existing trees be retained to the extent practicable.
 24. The predevelopment area (52.56 acres) does not match the post development area (52.32 acres) in the calculations. This should be corrected.
 25. The site relies on roof drainage being directed to recharge areas or specific SMA, implying that there is a roof drain collection system tied into gutters. No details of the collection system were found in the plan set. **It is recommended that the Board include in their decision a requirement for gutters on the buildings.**
 26. The profile sheets show the traditional Stormwater collection system but do not address the area drains and roof drains. It is recommended that these plans show all drainage systems and that the water line is shown in gray for reference, particularly in areas where drainage or sewer lines (main and services) are at approximately the same elevation as water main/services. There appears to be a possible conflict for the Unit 40 services.
 27. The utility plans should show all utilities and all drainage for coordination purposes.
 28. The infiltration rate for the SMA 6 and 8 are indicative of the sand soils. This office agrees with the use of this rate if the bottom area is in a chamber system but not when covered in loam and subject to surface debris (i.e. leaves). It is recommended that the infiltration rate be adjusted to b 2.41 ft/day.
 29. The porosity values, used in the groundwater mounding calculations is the same for all soil types, please provide a reference and not that this should be available porosity – soils with a higher silt content has more surface tension so the available porosity is reduced.
 30. The Pond report for Reservoir 37 – Individual Roof drain, has a typographic error. The height should be 7’ not 70’.
 31. A proposed drainpipe appears to pass through the roof recharge system (RD2) on sheet 16. Based on the elevations provided it appears the pipe will be in conflict with the Stormtech Chambers.

Landscape Plan Comments:

32. The landscape plans do not depict unit numbers or roadway stationing, making reference to particular areas difficult. We request the plans be revised to include either unit numbers and/or roadway stationing.
33. The plans show the clearing of a substantial area of land close to the perimeter property lines. No buffers to adjacent residential properties are depicted. In particular, the following areas should be reviewed for the placement of buffers:
 - a. The outside play areas to the west of the club house are 20’ (bocce court) and 30’ (Pickle court) off of the westerly property line. No fencing screening or buffering to the immediate neighbor is proposed. The limit of clearing line (clouded tree line) depicts clearing up to the property line in this area.
 - b. To the west of units 8-10 (Private Drive C) the limit of clearing again extends to the property line; providing large lawn area behind these units. The neighbor’s house at 82 Priest Land is ~65’ off the property line. We recommend that the limit of clearing be moved away from the property line and some fencing/screening/planting be provided in this location.
 - c. To the south and east of units 36-31, the limit of clearing again extends to the property

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line potentially affecting abutters off of Burrows Road. We recommend that the limit of clearing be moved away from the property line and some fencing/screening/planting be provided in this location.

34. Landscape Trees/Lawn Areas:

The project depicts some street trees and provides detailed foundation plantings, but leaves large areas of the project as open space, presumably lawn. With the exception of the interior of the loop on drive B, areas between units and around some of the drainage basins should have a variety of trees to provide shade and meet the requirements of 4.4, 1), where "The development of large lawn areas shall be minimized....". It is our opinion that "islands" of plantings should be provided in these large areas to reduce the amount of lawn and increase wildlife habitat.

35. Parking Lot Planting.

The planting plan depicts more than a sufficient number of trees, which will cast shade on the parking spaces, to meet the requirements of 4.4 4). However, the species selection proposed is Thornless Honeylocust. We recommend a different species be chosen for the reasons noted below.

36. Town Center District (4.4, 5), requires that the use of bituminous concrete be minimized and alternate paving materials be used. This has not been addressed in this application. We recommend that the planted island have granite curbing and the radii along Mass Ave also be granite. The crosswalk to the south of the clubhouse and the walks around the clubhouse could be of brick or embossed concrete.

37. Street trees:

a. Species:

Including the planting of trees in front of the clubhouse only three tree species are proposed along the driveways: London Planetree; Red Maple and Thornless Honey Locust. Only Red Maples are indigenous to this area. The selection of these trees does not meet the criteria of 4.4 1) & 2). We recommend a minimum of five different species indigenous trees be used as street trees for this site.

London Planetree: The proposed use of London Planetree is not advised. These trees get to be very large and grow quickly. They are more appropriate set back into the landscape, not as a street tree. They are not an indigenous species. Their roots are shallow and if planted adjacent to a sidewalk will buckle the sidewalk in short order. They are a messy plant with litter from twigs, large leaves, bark and fruiting balls posing clean-up problems. They attract a wide variety of insects, which are not likely to severely damage the tree including borers, Japanese beetles, caterpillars (including gypsy moth).

Thornless Honeylocust: This is an extremely hardy plant that is not indigenous to this area. It is a good tree for a street tree, except in the fall where the leaves are compound (many leaflets to a leaf) which when the fall, create a clean-up issue. However, it is over-used in this application and does not meet the indigenous species criteria.

b. Spacing/Placement:

- i. Trees are provided for a total of 114 street trees (including 7 in front of the club house) to accommodate some ~ 4,500 linear feet of roadway; resulting in an average of one tree at 38.5'. This is average represents one tree every 38.5' on one side of the street only. In general, we believe that the number of street trees proposed is insufficient given the amount of clearing proposed, the number of units,

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the linear footage of proposed driveway and the generous spacing depicted. We do not believe that the plan addresses the requirements of 4.4 2).

- ii. Many areas that should have trees do not, such as:
 1. To the easterly side of Driveway A, there are two drainage basins that are long and linear. No street trees are proposed between the road and the drainage basins. We recommend that trees be provided to break-up the view of the basins and provide some shade to the sidewalk which is also located on this side.
 2. At the intersection to the north of Drive C and A, (between units 15 and 18) and to the south of this intersection, there are large gaps where not trees are proposed. . are incomplete and show the limit of clearing that appears to be identical to the previous proposal where the buildings were more spread out. It is noted that the original decision 7.52 waived the requirement for locating all large trees with the condition that large trees be retained wherever possible.
38. Landscape plan does not specify any seed mixes. There are no indications as to any surface treatments (grass/wildflowers/ground covers). Typically there are multiple seed mixtures – lawns, naturalized areas and storm water basins, all reflective of the use and growing conditions. It is also noted that the Landscape Plans do not reflect the requirement for 6” of loam for planted areas (see also item 7, below).
39. Fertilizer use and application need to comply with 330 CMR 31.00 for non- agricultural application of nitrogen fertilizers. Soil sampling & testing at an agricultural lab is an integral requirement of this regulation.
40. Boxwood Blight is a fungal issue with the Boxwoods. It is recommended that an alternative plant species be specified as the boxwood is used extensively in this design.
41. Planting details should specify the removal of all non-biodegradable plant wrapping and roping from plants prior to planting. No shrub planting detail is provided. An extensive amount of shrubs are proposed to be planted. A shrub planting detail should be provided.
42. The applicant should consider the development of walking paths and/or trails. We would anticipate that some of the residents would want to walk to the club house and may make a trail through the woods as opposed to walking on the sidewalks. The development of casual walking paths along the wood line from the easterly portion of the site (drive b) to the clubhouse and Drive A should be considered
43. We routinely require on our projects that an arborist to review the remaining trees after clearing operations to determine if additional dead, diseased, damaged or leaning trees should be trimmed or removed. We recommend the Board consider such a requirement.
44. Section 4.4. 7) requires that the landscaped areas be maintained in a “healthful condition”. We recommend that a Landscape Maintenance Guide be developed for the project to guide the future owners in maintaining the trees, shrubs and other landscaped areas. Such a manual should address pruning, fertilization, watering, etc. as is normal for large landscapes.
45. No landscape irrigation system is noted. The applicant should clarify if it is proposed or not.

Site Lighting:

46. A total of six light posts are proposed for the project. The posts are proposed as 10’ tall with a shielded lantern configuration fixture. This light will not have an extensive light “throw” and will not illuminate a large area. The Board should review if they believe that amount of lighting is sufficient.
47. Only street lights are proposed in the area of the clubhouse. We recommend that additional information be provided for lighting by the pool, by the two outdoor courts (and any screening of lighting to the neighbors), area lighting for the mailbox kiosk and an additional light at the crosswalk to the south of the clubhouse- where the sidewalk crosses driveway A.

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48. No lighting is proposed at the entry sign. The applicant should confirm this is intentional.

Additional Comments:

49. The Stonewall removal application indicates 54'± of stonewall disturbance. Based on the grading shown on sheet 5, this office estimates that 130'± of wall will be disturbed or removed. The applicant should clarify this discrepancy.
50. A construction detail for the proposed roadway gates should be added to the plans.
51. A construction detail should be provided for the drainage channel under the proposed sidewalk on Route 111, shown on sheet 10.
52. This office recommends a vertical style curb adjacent to sidewalks within the site and between the clubhouse and the parking lot. An alternative would be to add curb stops.
53. The clubhouse parking lot entrance has been reduced to a 20' width, while other areas are all 24'. The Fire Department should approve this width as they will likely enter the Clubhouse at this location. The emergency access to Priest Lane has also been reduced to 20'. It is recommended that the design engineer provide a fire truck analysis to demonstrate that all areas are accessible by the Boxborough (and mutual aid) apparatus.
54. Additional detail is needed for the geometry of the entrance with the island including labeling all radii and pavement widths.
55. This office recommends a steel guardrail at the wetland crossing as opposed to the wooden guardrail shown on the plans. It appears to be a 16' drop from the paved surface to the stream channel at this location.
56. This office recommends that the catchbasins in the clubhouse parking areas be setback from the rear corners of the parking spaces. Catchbasins located in the corners are often rendered unusable by snow plowing, resulting in ponded water and icing potential.

Please contact this office should you have any questions regarding this review or the project in general.

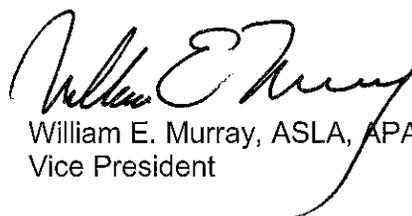
Thank you.

Very truly yours,
Places Associates, Inc.

BY:



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