



December 13, 2022

Stow Planning Board
380 Great Road
Stow, MA 01775

Re: Project Peer Review
The Cottages at Wandering Pond
Project No. 5366

Dear Board Members:

This office has received and reviewed the submittal documents for "The Cottages at Wandering Pond". As discussed with the Planning Staff, there are considerable technical review comments that we feel would be resolved easier with a meeting between our office, the Planning Staff and the design team. This letter identifies the general overview comments with examples rather than giving a plan sheet by sheet itemization of comments and questions.

This office reviewed the following documents submitted with this application with items since the initial review shown in **bold**:

1. Application for Active Adult Neighborhood Special Permit "The Cottages at Wandering Pond" by Stamski and McNary dated June 30, 2022.
2. Traffic Impact Study by Vanasse & Associates dated April 19, 2022.
3. Stormwater Management Report for "The Cottages at Wandering Pond" by Stamski and McNary dated June 29, 2022. **Revised October 27, 2022.**
4. Site Plans entitled, "The Cottages at Wandering Pond" Athens Street, Map R02, Parcels 1A, 3, 4, 5, 18, 19, 20-7, Stow, MA, prepared by Stamski & McNary, Inc, Acton, MA, dated June 30, 2022 (46 sheets). **Now 72 Sheets revised October 27, 2022**
5. Landscape Plans entitled, "The Cottages at Wandering Pond" Athens Lane, Stow, MA, prepared by Stamski & McNary, Inc, Acton, MA dated 6/28/22 (5 sheets) **Revised 11-14-22.**
6. **Memo to the Planning Board from Jesse Steadman, Town Planner dated July 28, 2022 re: Staff Review of Cottages at Wandering Pond**
7. **Letter from Stamski and McNary dated October 26, 2022 – Response to Peer Review Comments.**
8. **Letter from Provencher Engineering to Bruce Wheeler dated November 14, 2022 regarding Potable vs Irrigation Water Withdrawals.**

General Comments:

We have reviewed the plans and calculations in detail and have many technical comments which are not unusual for such a large plan set. Rather than identifying each and every item noted, we suggest that this letter address the “bigger picture” items rather than something being labeled incorrectly or a detail missing. Some of the items addressed in our initial review were addressed in the most recent cover letter and marked off as completed – in other cases, we were unable to find the data as indicated. We also note that the revised submittal documents and plans did not address the comments by the former Town Planner dated July 28, 2022.

1. The proposed culvert replacement for the Athens Lane crossing has not been adequately addressed. This culvert is critical to provide the only access to 141 homes and must be functional in all weather conditions. The FEMA flood plain data shows the flood elevation the same on both sides of the existing culvert, indicating an overtopping the existing culvert and road. The proposed culvert is 11’8” wide bottlenecking down to a 5’3” culvert both 3-4’ open height. This poses a high probability of debris getting trapped under the roadway with no safe way to clear the culvert. Given the historic beaver issues in this watershed, this crossing must be simplified and be of a design that can easily be maintained. The culvert on Kettle Plain Road was overdesigned to provide capacity in the event of a beaver dam breach. Lacking a secondary access to this property, it is our opinion that this crossing needs to match and exceed the capacity to handle the 100 year flooding event without constraints.

The proposed culvert for Joanne Drive was a similar 3 sided culvert set on footings with the design calling for a natural channel, similar to this design that originally looked fine but was difficult and more expensive to construct. It is strongly recommended that a 3 piece culvert (top separate from sides) be specified so that it can be physically constructed, required areas backfilled, compacted and riprap stabilization installed safely without needing flowable fill or having a confined space.

The construction of this crossing is proposed in Phase 1 of the construction. We concur and recommend that the second crossing, on Wandering Pond Way also be required for Phase 1 as well since there will be many vehicle trips both bringing in fill for the leaching area and cutting the grades for Stepping Stone Lane. This crossing should be made to meet the loading requirements of H20 loading so that it can support construction vehicles as well as emergency apparatus.

2. This office reached out to the Fire Chief regarding the fire cisterns and other public safety concerns. He responded that the first phase of the project must include an operational fire cistern shown by the clubhouse on Wandering Pond Way in order to begin building. Other issues identified in his email include:
 - Fire cisterns should have a turn out space, so they do not block road access.
 - Cisterns should be a maximum of 1000’ to structures.
 - Fire cisterns should be designed in compliance with the Stow Fire Department specifications.
 - No parking on any roads be allowed within the development.
 - The road names “Wandering Pond Way” and “Wandering Pond Circle” are unlikely to be approved for 911 due to similarity.

3. The site relies heavily on the availability of 4 parking spaces per unit, 2 in the garage, 2 in driveway. Additional guest parking is available for those units on Daisy and Buttercup Lanes (3 each) as well as at the Wastewater Treatment Plant (6) and the Clubhouse (8 paved, 16 grass). For those homes on Wandering Pond Circle, these “guest” spaces are over 1600’ (1/3 mile away), with 525’ of roadway at almost 8% grade (as measured from where Wandering Pond Circle begins). It is strongly recommended that small parking areas for guest parking be dispersed throughout the project, particularly since the Fire Chief has requested that no on-street parking be allowed, and signage be required.
4. The Clubhouse provides only 24 parking spaces for 141 units. As 95 units are more than 1000’ from the clubhouse. These residents are more likely to drive, particularly families with young children, for the elderly or during extreme heat. This office questions whether more parking should be provided for this common area. The Planning Board should provide guidance on this issue.

The clubhouse plans lack details including location of handicap ramps, location of lighting (will pool area and pickleball courts be lit?), crosswalks, bicycle racks, details of grass parking spaces (reinforced?) and porous pavement. We note that reinforced grass pavers were utilized at Arbor Glen and after several years, the residents requested permission to have them paved. The Planning Board should provide guidance on this issue.

We also note that the clubhouse has only one male and one female bathroom. Although this is building code requirements, the pool will be used by families and we question what the pool capacity is versus the number of residences, number of parking spaces and number of bathrooms.

5. No provision for mailboxes is shown. Given the number of units and the distance between the units, it is recommended that they consult with the Post Master to determine if more than one area is necessitated. Please provide adequate parking for the mailbox area considering distance to the units being served by kiosk.
6. The plan set provides detailed Phasing Plans. The focus appears to be on the unit construction and not the infrastructure construction. The limits of phases do not seem to consider the drainage design where catchbasins will be constructed in one phase and the stormwater basin they discharge into is in a future phase. Similarly, it is unclear as how other utilities including water and sewer will be phased in. We note that the water line layout lacks water gates that are normally provided to allow areas to be isolated as well as facilitate phasing as well as blow offs to allow the flushing of lines. Either a reconfiguration of the Phasing Plans or utilities is warranted.
7. Many of the general site features are not clearly identified on the plans including handicap ramps, crosswalks, stop signs, street lights (typical shown on the landscape plan but not civil), and other signage.
8. The review of the Stormwater Report has identified multiple areas of concern including depths to groundwater, inconsistencies in recharge infiltration rates and constructability of the design. Calculations indicate the use of hydrodynamic separators which are not specified where on the plans (Athens Lane?), basin details are incorrect (impermeable core), no details for the drop inlets and rain gardens are provided. These items are mostly technical in nature, and we suggest best addressed directly with staff and the applicants’ engineer.

9. The Erosion and Sedimentation Control Plan contains fewer details and verbiage normally provided for a project of this scope. Notes do not adequately address site construction, construction of individual units, the use of temporary sediment control basins versus infiltration basins, construction of drainage structures, and extreme weather condition measures. This site has similar conditions (drumlin with glacial till soils and steep grades) to Regency and it has similar or more significant concerns.

The plans should also address the location of the construction trailer, port-a-johns, concrete washout stations, vehicle refueling and overnight vehicle parking to coincide with the construction phasing.

10. Landscape Plans. Our firm's Landscape Architect reviewed the plans and had the following general comments:

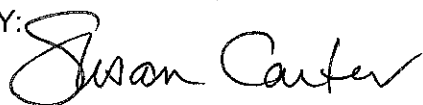
- Plans are a rendering rather than actual landscape plans.
- No demarcation between lawn vs. slope vs. wildflower vs. low maintenance seed mixes/areas.
- Details lacking on seed mixes – likely 4 different mixes. No loam specifications
- Only Cottages have flowering trees – remainder of site has shade trees
- Bloodgood Plane Trees become very large, up to 100' in height.
- No materials listed for pathways. Will a forester or arborist clear the trees pathway?
- No signage indicated for pathways
- No details for signage at entrance or streetlights (typical shown in one location on plan).

We hope that this letter identifies those general areas that will need to be worked out with the design team and where the Planning Board's guidance is needed moving forward to completion of the permitting process.

Please contact this office should you have any questions on this review.

Very truly yours,
Places Associates, Inc.

BY:



Susan E. Carter, P.E., LEED AP
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