



**STEPHEN W. COLEMAN**  
ENVIRONMENTAL CONSULTING, LLC

Environmental Planning & Site Analysis  
Wetland Mitigation & Restoration Plans  
Wetland Delineation & Assessment  
Natural Resource Management  
Pond & Lake Management  
Wildlife & Plant Surveys  
Breeding Bird Surveys  
Landscape Design

## MEMORANDUM

To: Ms. Ingrid Richards, Chairperson  
Town of Ossining Planning Board  
Members of the Planning Board  
From: Stephen W. Coleman  
Re: **Artis Senior Living, LLC, 553 North State Road, Briarcliff Manor, Town of Ossining - review of revised plans, application materials and plans, potential wetland impacts and recommended mitigation measures**  
Date: October 21, 2015  
cc: D.Stolman, FPCA

### Materials Reviewed:

- Letter to Planning Board from Janet Gris, Esq., dated 09-02-2015 re: Application of Artis Senior Living, LLC.
- Letter to Planning Board from Brian Hildenbrand, P.E., dated 09-02-2015, re: Artis Senior Living.
- Narrative Report for the Environmental Assessment of Artis Senior Living, dated last revised August 2015, as prepared by Kellard Sessions Consulting, P.C.
- Letter to Planning Board from Donna Sharrett, dated 07-16-2015, with attachments.
- Letter to Planning Board from Donna Sharrett, dated 08-03-2015 with attachments.
- Email from Donna Sharrett, dated 10-09-15 re: watercourse recap and follow-up from 10-08-15 meeting.

As per the request of the Planning Board, I have reviewed the above materials, and also attended an office meeting to discuss wetland related issues on 10-08-15. Based upon my review and discussion, I offer the following additional comments in bold text:

### **Artis Senior Living Site Development Plans: - Wetland Mitigation Plan:**

I have reviewed the proposed Wetland Mitigation Plan, dated August 01, 2015. The applicant has addressed all of my prior recommendations that were outlined in my 07-07-2015 wetland review memo. For your information, here is what was previously recommended:

"There are several mitigation measures that would improve the current functional value of the adjacent wetland and the watercourse channel, and there associated buffer areas". The following measures are recommended:

- The entire berm along the rear property line should be cleared of all invasive plant materials, and the slope re-stabilized. The soils on the berm should be treated to assist with elimination of invasive plant seed stock and roots that are within the berm. After

treatment, new soil should be brought in to cap the berm and the entire surface area re-planted with a combination of native shrubs and ground covers. The re-creation of a naturally vegetated berm along the edge of the wetland would create more functional habitat and serve to minimize the spread of invasive plant species.

- **The proposed wetland mitigation plan shows the recommended details as noted.**
- **As discussed, the herbicide treatment should consist of cutting the plants at the base and then an injection into the root system to maximize the effectiveness of the glyphosate treatment. Although chemical treatment is recommended for several seasons, the combination of removal of existing soils, re-grading, the addition of new soil, along with an initial chemical treatment, and then immediate planting with a dense shrub layer, and a conservation seed mix, should allow the new plantings to successfully compete with the remaining invasive seed stock that will likely regenerate.**
- **Ongoing monitoring for a minimum of 5 years is recommended to guarantee long-term success of the mitigation plantings.**
- **Although, the forested wetland is not regulated by Chapter 105, it is recommended that the wetland be considered as part of the project's buffer mitigation measures.**
  - **The applicant should seek permission from the adjoining landowners along the rear property line to remove invasive plant species that are located along the edge of the wetland. Once removed, the area could be re-planted with native shrubs and ground covers to help protect and improve the edge habitat along the forested wetland. This unregulated wetland area does provide hydrological support for the intermittent watercourse, and removal of invasives and re-planting with native species would help off-set the permanent loss of the 50 foot buffer area that is located on the subject parcel.**
  - **The wetland mitigation plan shows proposed plantings along the edge of the wetland. The applicant should confirm whether they have made arrangements with the adjoining neighbors to allow work on private property. The wetland area extends onto two separate tax parcels.**
  - **The proposed wetland mitigation strategy should focus on invasive plant removal on the property owned by 557 North State Road LLC, where the concentration of invasive plants is well established. Once invasive plants are removed, the area should be re-planted with the recommended shrub species and over-seeded with a wetland conservation seed mix.**
  - **Notes should be added to the plan that shows "general re-planting areas" that will be re-planted after invasive plants have been removed. It is recommended that the actual location of mitigation plantings be field determined by the applicant's wetlands consultant in order to place new plantings within the best locations, and to minimize any disturbance to existing native plant species that are present.**

- The entire watercourse channel including the bottom should be stabilized with stone rip-rap along the banks. This would reduce the amount of sediment transport and keep the banks of the watercourse channel from eroding.
  - **The proposed stream stabilization as proposed is over-engineered and does not require as much stabilization as shown on the proposed mitigation plan. The proposed stabilization measures should be revised to be done by hand equipment and create more of a natural stone stabilization. This would involve the placement of scattered stone on the base of the channel and the addition of two stone check dams with voids across the intermittent watercourse channel. The modest stabilization approach will assist with reducing potential scouring of the watercourse channel, and encourage better infiltration of runoff during low flow storm events.**

Additional Comments:

- **The proposed western headwall shown on the plan will be removed and no drainage will be discharged onto the adjacent parcel to the rear.**
- **As discussed with the applicant, temporary deer fencing should be installed around the perimeter of the proposed wetland and wetland buffer mitigation plantings. The temporary deer fence should remain in place for the duration of the recommended 5-year maintenance and monitoring period.**
- **A five-year wetland maintenance and monitoring plan should be prepared that follows recommended protocols for maintaining and evaluating the success of mitigation measures. A sample plan if needed could be provided to the applicant's consultants.**

This completes my review and recommendations regarding the proposed application and planned wetland impacts. Please let me know if you have questions or require additional information.