## The ACO Driveway Improvement Initiative

In the past, all attempts to resurface the ACO driveway (and parking area) have not proven to be durable. Over time, the driveway has returned to its default state: a deteriorating eyesore.

The underlying reason for the driveway degradation is water: storm water runoff from higher elevations slowly deteriorates the asphalt from above, and subsurface water accumulates below, undermining the bed of the driveway. Particularly in the wet seasons, the driveway sits atop "spongy" ground. Over time, the loading from vehicles causes the poorly-supported asphalt to flex and crack, after which it becomes even more vulnerable to water damage from above and below.

Until recently, we've defined the driveway improvement challenge as: How to create a durable and permanent replacement in the same location but with a slight expansion to accommodate about 6 more cars.

Then, unexpectedly, natural forces rearranged our front yard. Hurricane Sandy resulted in the destruction and subsequent removal of a line of ten 60+ ft. tall spruce trees in the ACO front yard. The cleared path left behind by the absence of those trees is directly in line with the entrance to our property. This gave us fresh perspective and an awareness of a new driveway and parking layout possibility: Remove the problematic existing driveway and parking areas, and create a straight-in, 2-lane, 2-way entrance and driveway leading to a new and expandable parking lot on the left (Princeton) side of the main building. Accessible from the parking lot, a new building entry portico or structure would be added to the left side, opposite to the existing entry door.

This new driveway, parking, and entry arrangement offers the following advantages:

- 1. We will avoid spending \$35K+/- to properly and durably upgrade the existing driveway, which has the following foundational weaknesses:
  - A. With regard to water-related problems, it is located in THE worst place on our property. Most of the driveway and parking area is within a 50 ft. buffer zone adjacent to delineated wetlands or a natural waterway. Same goes for its location within a 100 yr. flood zone defined by storm water overflow from the brook running down the side and along the front

- of the property. In addition to those factors, there is a prolific shallow (13-15 ft.) spring which feeds the abandoned well at the top of the driveway. Considering the extensive sump pump activity in the basement, there are very likely other underground water sources beneath the main building and upper portion of the driveway.
- B. Other than extending the driveway beyond the main building and converting the backyard into a satellite parking lot, it offers no expandability to accommodate additional parking spaces. Nor does it offer the option to expand its footprint to allow two-way in-out traffic and easy vehicle turnaround in the parking area, because there are very strict municipal and state codes and onerous agency permitting processes governing property improvements ("disturbances") in and around wetlands and flood zones.
- C. It does not provide an inviting and transparent experience for new visitors, who must first negotiate their vehicles through the narrow entry between the guardrails along Rt. 27, then turn sharply to the right, after which they follow the narrow driveway up to some visually hidden destination which, when they arrive, has the appearance and feel of a dressed up "back door".
- 2. Beyond the wetlands ribbon along the Rt. 27 culvert and the upper limit of the 100-year flood zone somewhere forward of the main building, the new driveway and parking lot will be in an environmentally unrestricted area of the property. With proper planning, future expansion of the parking lot would be readily permitted.
- 3. The lower portion of the abandoned old driveway could be offered to the NJ DEP for expansion of reserved wetlands. This land swap could eliminate any additional fees that the NJ DEP now charges for encroachment on existing wetlands that would result from widening our entrance and driveway to accommodate 2-way traffic. Aesthetically, an expanded wetlands area in the northeast corner of the property has good potential for becoming an attractive landscape feature.
- 4. Immediately, upon entering the property, new visitors will see and understand the layout of the property and the direct path to their destination: a prominent and welcoming new entrance structure that will protrude from the main building.

Respectfully submitted: James Wittes, Property Improvement Project Manager June 17, 2013