

Town of Mansfield
CONSERVATION COMMISSION
Meeting of 20 April 2016
Conference B, Audrey P. Beck Building
MINUTES

Members present: Aline Booth (Alt.), Neil Facchinetti, Quentin Kessel, Scott Lehmann, Grant Meitzler, John Silander. *Members absent:* Joan Buck (Alt.), Robert Dahn, Michael Soares.

Others present: Jennifer Kaufman (Wetlands Agent); Howard Raphaelson, Janet Welch, Jim Wohl, Kathryn Ratcliff, Leonard Jacobs (W1561); Ed Pelletier (Datum Engineering, W1561, W1562, W1565); George Logan (REMA Ecological Services, W1561 & W1564); Gerald Hardisty (CES Engineering, W1561 & W1562); Rick Zulick (Datum Engineering, W1562); Robert Magi, Michael Yenke (W1562); Tony Giorgio & Tom Fahey (The Keystone Companies, W1564); Dave Ziaks (F. A. Hesketh & Assoc., W1564); Alison Hilding.

1. The meeting was **called to order** at 7:30p by Chair Quentin Kessel. Booth was designated a voting member for this meeting. The agenda was reordered to take up W1565 after W1562.

2. The **draft minutes** of the 16 March 2016 meeting were approved as written.

3. IWA referrals.

a. W1561 (Raphaelson, Dog La). {Material regarding this application included in the packet for this meeting:

(1) Report dated 3/27/16 on the parcel's wetlands by REMA's George Logan. In Mr. Logan's professional opinion, "existing wetland and watercourse functions and values will not be degraded by the proposed activities." (p.1) Points relevant to the Commission's concerns about nutrient loading of wetlands (expressed in the first bullet under (2) of the motion on item 3a, 3/16/16 minutes) are:

- The conservative design of septic systems under the current permitting regime minimizes risk of system failure. (p.6, third diamond)
- In normal operation, the septic systems should not overload the wetlands with nitrate:
 - a. During dry periods, septic nitrate is unlikely to get into the wetland, because the primary systems on Lots 1 and 2 (resp.) are 66 ft and 94 ft (resp.) from it (p.6, second diamond), and the "eastern stream" is only "intermittent" (p.4, third diamond; p.7, second bullet).
 - b. During "high flow and high groundwater periods" septic nitrate may be transported into the wetland but not at concentrations that would overwhelm its de-nitrification processes (see p.7, third bullet): "... even concentrations of 4 to 7 mg/L would not be detrimental to the wetlands or the watercourse, because during the times of higher stream flows, when nitrate-nitrogen could be experienced here, there would immediately be significant dilution from surface flows generated in the +/- 85.8-acre watershed." (p.7, fourth bullet).

Mr. Logan also doubts that two species of Special State Concern – the Appalachian brook crayfish and the wood turtle – are present on the parcel. A "moderate intensity search for crayfish species" on 320 ft of the eastern stream channel failed to turn up any sign of them (p.4, fourth diamond). The wood turtle prefers "more open successional habitats" and the site is a long way (2K ft & uphill) from the Fenton River, where individuals of this species have been found (p.5, first diamond).

(2) Letter dated 3/30/16 from CES's Gerald Hardisty, which estimates nitrogen loading of

7.26 mg/l based on modeling in a 1992 technical bulletin from the Water Resources Office of the Cape Cod Commission.

(3) Letter dated 3/28/16 from Dawn McKay at DEEP, noting that, according to DEEP's records, there are "extant populations" of the two species of Special State Concern "in the vicinity of the project site" and recommending strategies to protect these species during construction, should they be present. }

Owners of two neighboring properties voiced misgivings about the project. On behalf of several neighbors, Jim Wohl (128 Dog La) read a statement questioning whether the Town's zoning regulations really permit disconnected frontage to count toward meeting the frontage requirement for Lot 2; in any case, it seems a bad policy with a potential for adverse impacts on wetlands. He urged that only one house be approved for the parcel. Datum's Ed Pelletier responded by saying that Lot 2 meets all dimensional requirements in current zoning regulations.

Kathryn Ratcliff (60 Bundy La) asked if there wasn't a more recently developed model for estimating nitrogen loading than the one used by Mr. Hardisty. Kessel wondered why it was appropriate to use a nitrogen-loading model developed for use on Cape Cod, which is basically nothing but sand. Kaufman responded that DEEP is satisfied with the model. Ms. Ratcliff pointed out that nitrate is not the only problem-substance that leaches from septic systems; pharmaceuticals may also adversely affect amphibians and other wetland organisms. In her view, proposals should be approved only if they can be shown to be benign (rather than disapproved only if they can be shown to be harmful). She also noted that there were crayfish and turtles, though perhaps not of the species of concern, at a nearby pond on her property. Silander wondered if there was any actual evidence that wood turtles were not present on the parcel.

In response, Mr. Logan conceded that wood turtles could be present, though he thought it unlikely. In any case, the main threat to them would be in the construction phase and could be addressed by strict sediment controls. As indicated in his report, no crayfish were found in the eastern stream below the two house sites at a time one might expect to find them, if present, though there might be some farther downstream. Regarding nitrogen-loading, Mr. Logan expects that the moderately well-drained soils between the proposed septic systems and the wetland would ordinarily denitrify septic leachate before it enters the wetland.

When questions regarding the proposal (or the people inclined to raise them) appeared to be exhausted, Kessel moved that the Commission reiterate to the IWA the concerns expressed in (2) of the motion on W1561 passed at its March meeting:

Having read the wetland report on W1561 and heard from local residents and the applicant's representatives, the Commission:

- Remains concerned about the potential for nutrient loading from the engineered septic systems, and suggests moving these systems farther from wetlands or reducing the number of houses from two to one; and
- Suggests that the parcel's owner consider conservation easements to enhance wetlands protection and a trail easement across Lot 2 to provide for a future connection to Whetten Woods & Storrs Center from the Nipmuck Trail, via the Torrey Preserve and Holly La.

This **motion**, seconded by Facchinetti, passed unanimously. Visitors drawn to the meeting only by W1561 then left.

b. W1562 (Meadowbrook Gardens, Meadowbrook Rd) A 3/31/16 report on this project by BSC Group-Connecticut was included in the packet. Kaufman summarized its recommendations regarding wetlands protections and storm-water management. These include maintaining a buffer of trees and other vegetation between the development and wetlands,

particularly on steep slopes to the south and west (comment 21, p.6); moving the west and southwest storm-water basins farther from wetlands (comments 22 & 23, p.6); reducing paved area at the southeast corner to save more natural vegetation (comment 24, p.6); enhancing silt barriers along the west-southwest-south perimeter of the construction envelope (comments 15 & 16, p.4); increasing the diameter of drainage piping to handle large storm events (comments 4, 5 & 6, pp.2-3); redesigning catch basin 7 near the southeast corner (comment 10, p.3).

Mr. Pelletier described changes in the design, noting that many of BSC's recommendations had been incorporated into it. Substantial plantings have been added to separate the development from the wooded slope, and to screen it from Meadowbrook Rd. There is now just one driveway into the complex from Meadowbrook Rd; a sidewalk along it will connect to the sidewalk from Whispering Glen to Sunny Acres (see W1565 below). A 1-acre conservation easement adjacent to the one at Whispering Glen is proposed for the steep slope on the south; access to a trail along Conantville Brook would be provided at the southeast corner of the development. Silander observed that the rain gardens previously suggested by the Commission hadn't made it into the revised plan: the storm-water basins will be planted in grass, not wetland vegetation.

Datum's Rick Zulick reviewed his 4/06/16 "Wetland function and value assessment" report on the project, which was distributed at the meeting. The site is a gravel plateau sided on the west & south by wooded slopes down to wetlands. Mr. Zulick believes the proposed storm-water management system is adequate to infiltrate runoff and avoid dumping it into wetlands, save in extreme events. He noted that wood turtles may live along Conantville Brook below the proposed complex. Though he doubts that they would be attracted to the dry plateau, he recommends that plastic-sheeting silt barriers be supplemented with hay bales to keep them out during construction.

The Commission agreed unanimously (**motion:** Silander, Kessel) to comment that:

The potential for a significant wetlands impact by this project appears to have been minimized by the design of its storm-water management system and commitments to preserve natural vegetation on the slopes to the west and south and to add plantings along the top of these slopes. The Commission notes that many of its previous comments and suggestions about the project (see 3/16/16 minutes, item 3b, motion) have been addressed in the revised plan.

c. W1565 (Sidewalk, Meadowbrook Rd) PZC approval of the Whispering Glen project (adjacent to Meadowbrook Gardens on the east) required the developer to construct a sidewalk along Meadowbrook Rd from Whispering Glen west to Sunny Acres. Originally, the sidewalk was to be on the north side of Meadowbrook Rd, which would have required two crosswalks. This proposal moves the sidewalk to the south side, eliminating the need for them. Crossing the brook just west of the proposed Meadowbrook Gardens development would involve somewhat more work in and adjacent to wetlands. After brief discussion, the Commission unanimously agreed (**motion:** Silander, Booth) to comment that:

In the Commission's view, the somewhat greater wetlands impact of moving the Meadowbrook Rd sidewalk to the south side of the road is outweighed by safety considerations, since the new design eliminates two crosswalks.

Visitors not concerned with the remaining agenda items then left at 8:55p, and Kessel apologized to those who remained for having to wait so long for W1564 to be taken up.

d. W1564 (Storrs Lodges, Hunting Lodge Rd) Silander, who joined the 4/13 IWA Field Trip to the site and e-mailed some photographs of it to Commission members in advance of this meeting, recused himself from acting on this application. However, the presentation that

followed was strictly informational and the Commission took no action. The Town has commissioned a review of the proposal, which should be available at the Commission's 5/18 meeting. A public hearing is scheduled for 6/06.

A 218-unit (692 bed) apartment complex is proposed for a 45.9-acre parcel off Hunting Lodge Rd. {This is the same property formerly proposed for development as Ponde Place. That proposal was withdrawn when UConn refused to supply water, and test wells indicated that sufficient water was not available on site. Now that UConn can draw on the Shenipsit Reservoir via the Connecticut Water Company's new water main, a new proposal has been made.} Tony Giorgio, the developer's Managing Director, introduced Dave Ziaks and George Logan, who discussed wetlands on the parcel and what would be done to minimize the project's impact on them.

A displayed map of the parcel showed three wetland areas: (1) a large wetland between Hunting Lodge Rd and upland to the west; (2) a smaller wetland containing a vernal pool and separated from the wetland (1) by an old farm road running north from Northwood Rd; and (3) a piece of wetland jutting into the western part of the property from the south. Wetland (1) drains to Eagleville Brook, wetlands (2) and (3) to Cedar Swamp Brook. {GIS overlays for the map of Mansfield at <http://www.mainstreetmaps.com/CT/Mansfield/public.asp> show these three wetland areas joined by wetland or poorly drained soils.} Mr. Logan believes that wetlands (1) and (2) were once one and are separated by fill imported to construct the old farm road across it.

The proposed apartment complex of 47 two-story buildings would be accessed by a drive from Hunting Lodge Rd crossing wetland (1) on a bridge with a 30-ft span and turning north along the route of the old farm road between wetlands (1) and (2) to uplands on the northern part of the parcel, where most of the apartment buildings would be sited. (Emergency access would be from Northwood Rd.) Some fill on the east side of this route opposite the vernal pool would be removed to restore wetland in this area, and invasive barberry would be removed from wetland (1) north of the bridge. Two tunnels beneath the access drive would enable wildlife to move between wetlands (1) and (2) without dodging traffic.

According to Mr. Logan, the project has been designed to minimize impacts on wetlands and downstream areas. The apartment complex would be served by UConn's water and sewer system. Its buildings are to be spread out in small clusters so that runoff from impervious surfaces infiltrates the soil locally and the present pattern of drainage into wetlands is preserved. Pervious pavement would be used in overflow parking areas. Wetlands are to be buffered by undeveloped land, and bio-retention basins would filter runoff. In Mr. Logan's opinion, this project should not increase the volume (or decrease the quality) of runoff to Eagleville and Cedar Swamp Brooks.

The remaining visitors left the meeting at the conclusion of the presentation.

4. Membership. Alternate member Joan Buck is resigning. The Commission endorsed a statement of thanks drafted by Kessel:

The Commission thanks Joan Buck for her faithful efforts and for the perspective she has provided to it in recent years. It has been a privilege to have a former Town Council member work with us in dealing with Mansfield's conservation issues.

Kessel mentioned several people he thought would be good to have on the Commission; perhaps one of them can be interested in replacing Buck as an Alternate member.

5. Adjourned at 10:03p. Next meeting: 7:30p, Wednesday, 18 May 2016.

Scott Lehmann, Secretary, 24 April 2016; approved 18 May 2016..