Notes for ZBA Hearing: Thorndike Place

Dec. 8, 2020

Comments Summarized from the Arlington Conservation Commission

as given by Susan Chapnick, Chair

ZBA Hearing Dec. 8, 2020

Thank you, Chairman Klein, for the opportunity to summarize the Arlington Conservation Commission's comments from our <u>fourth</u> set of written comments on the Thorndike Place submittals – by letter dated Nov. 20, 2020 and from the Working Session held at the Conservation Commission's public meeting of Dec 3rd, where BSC Group and BETA Group (Town's peer review consultant) discussed the supplemental materials presented by the Applicant in November (as presented tonight).

The purpose of the Working Session was informational and to define next steps.

The ACC is pleased that the supplemental materials were responsive to many of our prior comments, however an important requirement of the ACC's wetland regulation to protect the ability of the 100-year floodplain to hold flood waters has not been fully addressed, as was discussed and will be summarized tonight.

In addition to those issues specifically discussed at the Working Session, I want to stress that the ACC's prior comments concerning the value of the wetland resources, vegetation replacement, floodplain, and stormwater impacts are still valid. I will summarize issues discussed at the Working Session as well as some others and recommend next steps.

Issue #1. Wetlands Delineation

ACC understands that BETA Group has performed a review of BSC's wetland boundary delineations and has agreed with the updated delineation. However, the Conservation Commission <u>does not yet agree</u> with the conclusion of BSC and BETA that the 2 Isolated Vegetated Wetlands no longer exist on the site. BETA's review does not appear to be based on any examination of the soils at the site. The Commission agrees with the Town Engineer's observation that the potential for the existence of the 2 isolated wetlands has not be adequately evaluated.

Recommendation:

 Perform soil investigation to evaluate the potential for Isolated Vegetated Wetlands in the northeast disturbed portion of the site, consistent with 310 CMR 10:55(2)(c)3 and Arlington Wetland Regs Section 21.B.(3)(c). BETA concurred at our Working Session.

These regulations say that "Where an area has been disturbed (e.g., by cutting, filling, or cultivation), the boundary is the line within which there are indicators of saturated or inundated conditions sufficient to support a predominance of wetland indicator plants, or credible evidence from a competent source that the area supported, or would support under undisturbed conditions, a predominance of wetland indicator plants prior to the disturbance or characteristic of hydric soils."

Issue #2. Floodplain & Compensatory Flood Storage

ACC understands that BETA Group has found that the flood storage volume lost and compensatory flood storage proposed are consistent.

ACC finds the 2:1 compensatory flood storage proposed consistent with Town Bylaw and Regulations.

Recommendations:

- Require that the applicant provide plans for floodplain restoration for the proposed compensatory flood storage area, compliant with the Vegetation Removal and Replacement Section 24 of the Arlington Wetland Regulations.
- Review existing FEMA Floodplain line. The ACC included this in our comment letter of July 9th; however, it has not been addressed by BSC or BETA but was brought up in Public Comment of the Working Session last week. The existing FEMA mapping is 10 years old and likely not based on the Cornell dataset (as required in our Wetland Regulations). When the Commission has valid documentation or compelling evidence suggesting that the FEMA floodplain and base flood elevation is not accurate, it can require an Applicant to re-delineate the floodplain line. Reference the Arlington Wetland Regulations Section 23.B(1)(c)ii:

"Notwithstanding the foregoing, where National Flood Insurance Program (NFIP) profile data [FEMA Floodplain line] is unavailable or determined by the Commission to be outdated, inaccurate or not reflecting current conditions, the boundary of bordering land subject to flooding shall be the maximum lateral extent of floodwater which has been observed or recorded or the Commission may require the applicant to determine the boundary of Bordering Land Subject to Flooding by engineering calculations which shall be..." [continues with specific requirements, including use of Cornell precipitation data]

• Require that climate change impacts be evaluated in consideration of the requirements of the "Limited environmental impact" review criteria specified in the ZBA Comprehensive Permit Regulations (adopted 7/08/2015) Section 6.2 & 6.3 — specifically, how the development demonstrates that it will "improve water quality, control flooding, maintain ecological diversity, promote adaptation to climate changes." The ACC recommends using data available for Arlington in the Massachusetts Coastal Flood Risk Model (MC-FRM, communication from Woods Hole Group) and information generated by Cambridge's Climate Change Vulnerability Assessment - considering that the base flood elevation/extent of flooding in the area is projected to rise in the coming decades.

Issue #3. Stormwater Management

ACC understands that BETA Group reviewed the efficacy of the stormwater management design presented by BSC and has enumerated several concerns. We have further recommendations for the design of the stormwater management system.

Recommendations:

• Require the use, in the stormwater modeling, of minimum standards now recommended by the MassDEP Stormwater Advisory Committee and the Town of Arlington proposed Stormwater requirements including the use of "NOAA Plus" precipitation data, 90% TSS removal, and revised recharge guidance. While ACC is aware that formal revisions to MassDEP regulations will not occur until next spring 2021, these stormwater standards will be in effect prior to the proposed project construction and, furthermore, it is within the spirit of the State Executive Order 569, State Hazard Mitigation and Climate Adaption Plan, and Arlington's Comprehensive Permit Regulations to conservatively design a stormwater management system so that climate change and hazard mitigation are taken into account.

Notes for ZBA Hearing: Thorndike Place

Dec. 8, 2020

• Require verification of existing groundwater elevations based on test-pit data. BETA concurred at our Working Session.

Issue #4. Evaluation of Wildlife Habitat & Vegetation

BSC provided a comprehensive Wildlife Habitat and Vegetation Evaluation report supported with field survey notes, as requested by the ACC.

Recommendation:

Require the Applicant to quantify the numbers and types of trees (including species and DBH)
that will be removed during construction in the AURA and impacted in the floodplain and
provide a vegetation replacement planting plan as mitigation for loss of canopy, wildlife
habitat, and climate change resilience attributes. This type of tally is required by Section 24 of
the Arlington Wetlands Regulations on Vegetation Replacement.

Issue #5. Conservation Restriction for Undeveloped Lands of the Mugar Parcel

Recommendation:

Propose an appropriate conservation and stewardship mechanism for the undeveloped
portions of the site as a condition of the permit. ACC recommends that the ZBA work with the
ACC, the Arlington Land Trust, the Arlington Open Space Committee and other Town officials to
develop an appropriate conservation and stewardship mechanism similar to the Symmes
Conservation areas that are protected resource areas under the Town Bylaw and implementing
Wetlands regulations. This mechanism should include funding considerations.