

October 26, 2021

Mr. Sylvester Bhembe Hudson Design Group 45 Beechwood Drive North Andover, MA 01845

RE: Wetland Report Stow 2 MA

Dear Mr. Bhembe,

Audra Klumb, NH Certified Wetland Scientist, visited the Stow 2 MA telecommunications facility to be located at 38 Randall Road in Stow, MA on October 15, 2021 to delineate any Bordering Vegetated Wetlands meeting the MA 310 CMR 10 jurisdiction as well as any surface waters within the vicinity of the project.

The tower is to be located adjacent to two parking areas associated with the golf course on the property. The tower center was observed to be staked at the time of the site visit. One Bordering Vegetated Wetland was observed within 200-feet of the tower facility, located to the south. The wetland appears to flow onto the property from the east, down the slope through a dug channel and then beyond the project review limits to the southwest becoming an intermittent stream with wetland borders.

The wetland was dominated by hydrophytic vegetation, had wetland hydrology, and hydric soils. The dominant wetland vegetation observed included narrow leaf cattail (*Typha angustifolia*), joe pye weed (*Eutrochium purpureum*), fringed sedge (*Carex crinita*), fox sedge (*Carex vulpinoidea*), dark green bulrush (*Scirpus atrovirens*), wool grass (*Scirpus cyperinus*), purple loosestrife (*Lythrum salicaria*), narrow leaf goldenrod (*Euthamia caroliniana*), New England aster (*Symphyotrichum novae-angliae*), bittersweet (*Celastrus orbiculatus*), poison ivy (*Toxicodendron radicans*), honeysuckle (*Lonicera* sp.), Japanese barberry (*Berberis thunbergia*), American elm (*Ulmus americana*), green ash (*Fraxinus pennsylvanica*), black birch (*Betula lenta*), sugar maple (*Acer saccharum*), and red maple (*Acer rubrum*). The boundary of the wetland was marked with pink WETLAND DELINEATION flagging labeled from the eastern property boundary with A-1 through A-17. The wetland boundary continues to the southwest beyond the limits of the review. The northern border of the intermittent stream was marked with pink and black striped flagging ST-1 through ST-7. The stream also continues southwest beyond the review limits.

The wetland meets the definition of a Bordering Vegetated Wetland and would therefore require the 100-foot buffer to remain undisturbed. The stream is intermittent and does not appear on the USGS topographic maps, therefore it does not meet the requirement of a river and would not require a separate setback.

Wetland Report Stow 2 MA

The wetland flags should be surveyed and shown on the project drawings along with the 100foot wetland buffer. Wetland buffer impacts should be avoided if possible. Any impacts to the 100-foot buffer would require a Notice of Intent to be filed with the town and state.

Please find the wetland sketch map and site photographs attached. Contact me with any questions.

Sincerely,

And fl

Audra L. Klumb, CWS#222 President

Enclosures: Site Photographs Wetland Sketch Map



Resources:

- Cowardin et.al., 1979. *Classification of Wetlands and Deepwater Habitats of the United States*; US Department of the Interior, Fish and Wildlife Service, Washington, DC
- Environmental Laboratory. 2012. "Army Corps of Engineers Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, (Version 2.0)" ERDC/EL TR-12-1, U.S. Army Engineer Research and Development Center, Vicksburg, MS.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. *The National Wetland Plant List*: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X downloaded from U.S. Army Corps of Engineers 2016. National Wetland Plant List, Version 3.3 http://wetland_plants.usace.army.mil/
- MA Department of Environmental Protection Division of Wetlands and Waterways. 1995. Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act, A Handbook. MA DEP Division of Wetlands and Waterways.
- Munsell Color (Firm). Munsell Soil Color Charts: with Genuine Munsell Color Chips. 2009. Revised, Printed in 2012. Grand Rapids, MI
- United States Department of Agriculture Natural Resources Conservation Service. 2016. *Field Indicators of Hydric Soils in the United States, A Guide for Identifying and Delineating Hydric Soils, Version 8.0,* L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils





Photo 1. View south of the proposed tower center location, a parking lot is visible to the right.



Photo 2. View east of the proposed tower site location.

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Photo 4. View northeast of the edge of the wetland where it met the mowed yard near the parking lot.

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Photo 5. View east into the wetland near wetland flag A-16.



Photo 6. View south of the northern edge of the wetland near wetland flag A-10, at right.

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Photo 7. View of the intermittent stream channel near flag ST-7, looking southwest toward the culvert.



