LUCAS
ENVIRONMENTAL, LLC

500A Washington Street, Quincy, MA 02169

November 15, 2024

Town of Ashland
Zoning Board of Appeals
Attn: Peter Matchak
101 Main Street
Ashland, MA 01721

Re: Environmental Impact Analysis
Comprehensive Permit
Sanctuary at Ashland Mills
10-60 Main Street
Ashland, MA 01721

Dear Mr. Matchak,

As requested, Lucas Environmental (LE) has prepared this Environmental Impact Analysis (EIA) on behalf of the Applicant, SLV Ashland, LLC, in association with Bohler Engineering, to review the potential construction-related environmental impacts from the proposed apartment community ("Sanctuary at Ashland Mills") located at 10-60 Main Street in Ashland, Massachusetts. The Applicant proposes to develop 250 apartment units on a limited dividend basis as required under all laws and regulations of the Commonwealth of Massachusetts.

The purpose of this report is to summarize the project elements for consideration by the Town of Ashland Zoning Board of Appeals for a Comprehensive permit submitted in accordance with the general requirements of Massachusetts General Laws, Chapter 40 (M.G.L. Chapter 40B) and determine the level and extent of impact (if any) on the environment within and adjacent to the proposed development. Please note that this effort is specific to the Town of Ashland's Zoning Board Comprehensive Permit Rules and Regulations and impacts on selective environmental concerns stated in the regulations; it does not evaluate constraints related to other local planning, conservation, or zoning requirements within the Town of Ashland Zoning Bylaw (Chapter 282 of the Ashland Town Code) or its implementing regulations.

This EIA is submitted in accordance with the Town of Ashland's Zoning Board Comprehensive Permit Rules and Regulations, which state the following:

An "Environmental Impact Analysis" prepared by a qualified environmental scientist, professional wetland scientist (PWS), certified soil scientist, botanist, hydrologist and/or other scientific professional with demonstrated qualifications (e.g. education, training, or demonstrated experience) provided to the Board. The Environmental Impact Analysis shall assess the impact of the development on the environment within the development and adjacent thereto. Such analysis shall include, but shall not be limited to, an evaluation of pre-development conditions and post-development impacts on:

a) surface and groundwater quality;
b) groundwater recharge of upper aquifers and perched groundwater layers;
c) wildlife habitats and corridors;
d) wetlands and bodies of water, including streams and rivers, both localized and general;

e) existing and potential domestic water supplies;
f) species of special concern in Massachusetts;
g) historic structures or historic areas; and
h) road salt and fertilizer loading.

1.0 EXISTING & PROPOSED CONDITIONS

A desktop investigation was performed during this analysis in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40) and regulations (310 CMR 10.00 *et seq*.); Section 404 of the Clean Water Act (33 U.S.C. 1344); MassDEP publication Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands (2022); the U.S. Army Corp of Engineers (USACE) Wetland Delineation Manual (1987); the Northcentral and Northeast Regional Supplement (2012); and the Town of Ashland Wetlands Protection Bylaw (Chapter 280 of the Ashland Town Code) and implementing Wetlands Protection Regulations. The following data sources were examined:

- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM);
- United States Geological Survey Topographic Quadrangle;
- MassGIS MassDEP Wetland and Hydrography Datalayers;
- National Wetland Inventory (NWI) Maps;
- MassGIS Natural Heritage Atlas Datalayers;
- United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) Soil Survey; and
- Massachusetts Cultural Resource Information System (MACRIS)

The Site is identified as 10-60 Main Street (Map 14, Lot 128) in the Town of Ashland, Massachusetts, and the aggregated parcel is comprised of land totaling approximately 7.8 acres. The site is located east of Main Street and south of Myrtle Street with a small portion of the property falling on the western side of Concord Street. The entire developable area is disturbed and impervious, including areas with soil contamination. The site is accessed via two primary driveways, leading to parking areas located to the north and south of the building. Additional surface parking is available along Main Street in front of the mill complex.

The proposed design includes the restoration and partial preservation of the two northernmost mills, which will be repurposed for commercial and retail uses, some of which will be open to the public, including approximately 7,500 square feet of flexible open space. The remaining brick structures will be demolished and replaced by a single, four- to five-story multifamily residential building containing 250 apartment units. The development will also include 211 concealed podium parking spaces, in addition to 126 surface parking spaces to replace the existing lot, for a total of 337.

The site's existing topography ranges in elevation from 180 feet to 192 feet. Water runoff generally drains toward on-site catch basins before being pumped/draining to the Sudbury River, which is located to the east of the site. An existing retaining wall along the length of the river serves as a flood barrier during high water events. Some areas of the site drain overland toward this retaining wall, discharging to the river through one of three overflow pipes. A small section of the southeastern portion of the site drains overland into the Main Street right-of-way drainage system.

The proposed building layout takes advantage of the site's topography, with the land sloping away from Main Street, allowing most of the parking to be concealed from public view. Approximately 80% of the parking will be located beneath the building, ensuring these spaces are not visible to pedestrians or vehicles passing on Main Street. This design also ensures that all habitable floors, as well as accessible open spaces, are elevated above the 100-year floodplain.

The ground floor of the proposed residential building will feature a central lobby and an approximately 5,800 square-foot open space, with direct access to two large, accessible open spaces, one at the front and one at the rear of the development. The building will contain a variety of apartment unit types and sizes across its five levels, designed to maximize natural light and offer open-concept kitchen, living, and dining areas. Units will feature spacious bedrooms, bathrooms, and laundry/storage areas, with some units including private, accessible balconies. As the design progresses, particular emphasis will be placed on incorporating sustainable and energy-efficient features, including carefully selected materials, fixtures, and building systems. The project will include electric vehicle charging stations, and the roof will be designed to be "solar-ready."

2.0 IMPACT ANALYSIS

This section details the project's compliance for each category under the Town of Ashland Zoning Comprehensive Permit Rules and Regulations EIA requirements.

2.1 Surface and Groundwater Quality

Based on the Town of Ashland GIS mapping, the site is not located within the local Groundwater Protection Overlay District defined under Section 8.2.2 of the Ashland Zoning Bylaws, *as overlay district superimposed on the zoning districts. This overlay district shall apply to all new construction, reconstruction, or expansion of existing buildings and new or expanded uses. Applicable activities or uses in a portion of one of the underlying zoning districts which fall within the Groundwater Protection Overlay District must additionally comply with the requirements of this district. Uses that are prohibited in the underlying zoning districts shall not be permitted in the Groundwater Protection Overlay District.*

As previously mentioned, the entire site is currently disturbed with impervious structures and surfaces, including areas with soil contamination.

According to the Notice of Activity and Use Limitation (AUL) under M.G.L. c. 21E § 6 and 310 CMR 40.0000 for the disposal site name, Near Pleasant Street, the site is within the AUL designation zone identified as (3-0015917). Cambell Environmental, Inc., the Licensed Site Professional (LSP) on the project will be scheduled to oversee the soil activities on-site during the construction related activities. Furthermore, in review of the proposed project, and according to the Applicant's LSP with Cambell Environmental Inc., the proposed project will not adversely impact groundwater quality. The proposed project will also meet the MassDEP Stormwater Management Standards.

2.2 Groundwater Recharge of Upper Aquifers and Perched Groundwater Layers

Impacts on groundwater recharge of upper aquifers and perched groundwater layers both during construction activities and as a result of the surface and subsurface changes from the completed project will be evaluated in depth. All stormwater issues will be addressed for the proposed project by the Town of Ashland Planning Board and/or the Town of Ashland Conservation Commission prior to reaching the Board of Health Review in accordance with the MassDEP Stormwater Management Standards.

A waiver is sought for the Town of Ashland Stormwater Management Bylaw (Chapter 247) and Regulations requiring a permit for any activity requiring Site Plan Review, any activity resulting in land disturbance of equal to or greater than 10,000 square feet or will increase impervious surface more than 50% of the parcel, any redevelopment project, and any activity that will alter, fill, or degrade a wetland.

2.3 Wildlife Habitats and Corridors

The site is largely developed with impervious and degraded surfaces. To the north and east, the property adjoins a forested Riverfront Area (RFA) along the Sudbury River, characterized primarily by mature upland forest species, including eastern white pine (*Pinus strobus),* Norway maple (*Acer platanoides*), northern red oak (*Quercus rubra),* and red maple (*Acer rubrum*). There are no Bordering Vegetated Wetlands (BVW) present between the river's edge and the site. The proposed design preserves the existing areas of the forested landscape, including the upland forest on the eastern side of the property, which borders the unnamed tributary to the Sudbury River.

Given the current state of the surrounding environment, including the presence of roadways and developed land to the south and west, wildlife habitats and corridors in these areas are limited and fragmented. The proposed development is not anticipated to have an adverse impact on local wildlife habitats or corridors, as it avoids disturbance to the critical forested areas and aligns with the existing environmental context of the site.

As such, the proposed project will not adversely affect the on-site resource areas about the interests of Wildlife Habitat and Corridors.

2.4 Wetlands & Bodies of Water, Including Streams & Rivers, Both Localized & General

Several inland wetland resource areas were identified within and adjacent to the site and include Inland Bank; Land Under Water Bodies & Waterways (LUWW); Bordering Land Subject to Flooding (BLSF); and the RFA to the Sudbury River.

According to the July 7, 2014, FEMA Flood Insurance Rate Maps (FIRM) for the Town of Ashland, Massachusetts, Map Number 25017C0514F, the site is located within Zone AE associated with the Sudbury River. Zone AE is classified as the 1% annual chance flood (100-year flood) where base flood elevations have been determined – Elevations range between approximately 184.5 feet and 186 feet (NAVD 88), which is also associated with Bordering Land Subject to Flooding (BLSF). An Order of Resource Area Delineation (MassDEP File #095-948) was issued by the Ashland Conservation Commission, confirming the resource areas on the site, valid through November 17, 2026.

There is one waterway and waterbody within the site that is identified in the MassDEP 2022 Integrated List of Waters (305(b)/303(d)). The Sudbury River (Segment ID: MA82A-25) is identified as a Category 5 water requiring a Total Maximum Daily Load (TMDL) per the Final MassDEP 2022 Integrated List of Waters (305(b)/303(d)). Waters are listed in Category 5 if they were identified as impaired (i.e., not supporting one or more intended uses), the impairment was related to the presence of one or more "pollutants", and the source of those pollutants was not considered to be natural. The causes of impairment in the Sudbury River from the Fruit Street bridge Hopkinton/Westborough to the inlet of Framingham Reservoir #2, Ashland are identified as mercury in fish tissue, *Escherichia coli*, and water chestnut.

Due to the presence of wetland resources within and adjacent to the site, the proposed development is subject to permitting under the Wetlands Protection Act (WPA). The project has been designed to minimize impacts to these resource areas to the greatest extent practicable. Although the project is being pursued under the provisions of M.G.L. c. 40B §§ 21-23 and 760 CMR 56.00 et. Seq. and, is therefore exempt from any otherwise applicable Ashland Bylaws, rules and implementing regulations, the majority of the proposed project will remain outside the 25-Foot No Disturb Zone (NDZ) to any resource areas in accordance with Chapter 280, Section 4B of the Ashland Town Code, as depicted on the Plans prepared by Bohler Engineering. The resources are identified below:

- Inland Bank associated with a 100-Foot Buffer Zone and a 25-Foot NDZ
- LUWW associated with the boundary below Mean Low Water (MLW)
- BLSF associated with the mapped Zone AE with a base flood elevation (BFE) ranging from 186 feet to 184.5 feet (NAVD 88); and
- 200-Foot RFA associated with the Mean Annual High Water (MAHW) line to the Sudbury River

The Sudbury River, located to the north of the site is mapped as a perennial pond per the most current USGS map (Ashland, MA – Quadrangle, 2024), and therefore presumed to be perennial. Vegetation observed along the Bank of the Sudbury River include a mix of mostly upland species such as, eastern white pine, honeysuckle (*Lonicera* sp.), Norway maple, white spruce saplings (*Picea glauca*), northern red oak, Canada mayflower (*Maianthemum canadense),* Japanese barberry (*Berberis thunbergii*), multiflora rose (*Rosa multiflora*), shagbark hickory saplings (*Carya ovata*), and garlic mustard (*Alliaria petiolata*) with the exception of a moderate canopy of red maple trees and nuisance species identified as poison ivy (*Toxicodendron radicans*).

The Bank of an existing canal is located to the south of the developed areas of the site. The surrounding area to the canal is degraded with rock, trash, debris, tires, rebar, and old granite rock/slabs. Vegetation along this Bank includes a moderate canopy with very little understory of Norway maple trees and saplings, honeysuckle, black locust (*Robinia pseudoacacia*), tree-of-heaven (*Ailanthus altissima*), Oriental bittersweet (*Celastrus orbiculatus*), poison ivy, Japanese barberry, multiflora rose, burning bush (*Euonymus alatus*), black raspberry (*Rubus occidentalis*), crabapple (*Malus spp.*), and common dandelion (*Taraxacum officinale*).

Work proposed within BLSF, the 100-Foot Buffer Zone and the 25-Foot NDZ to Inland Bank, and the 200-Foot RFA (located outside developed portions of the site that are part of the historic mill complex) are jurisdictional under the WPA. Proposed work will require review by the Conservation Commission and MassDEP through a Notice of Intent (NOI) review with the Ashland Conservation Commission.

Erosion control measures will be installed along the limit of work to prevent erosion and sedimentation from the proposed construction into the adjacent resource areas. A Pollution Prevention Plan will be implemented to inspect the site and erosion controls. Additionally, the proposed project will include Operations and Maintenance (O&M) Plan and an Environmental Protection Agency (EPA) Construction General Permit (CGP) since the proposed disturbance and construction area will be greater than one acre.

The Study Area is not located within an Area of Critical Environmental Concern (ACEC), Outstanding Resource Water (ORW), Surface Water Protection Area, Public Water Supply Watershed, or MassDEP Wellhead Protection Zone.

2.5 Existing and Potential Domestic Water Supplies

The site is currently served by municipal water and sewer systems, with electric, cable, and telephone services provided via above-ground utility lines along Main Street. A gas main running along Main Street provides gas service to the site. An existing 25-foot-wide utility easement runs parallel to the site's frontage along Concord Street, although it is located outside the previously disturbed areas associated with the mill buildings/complex.

The project anticipates utilizing the Town of Ashland's public water supply. The proposed water utility conduits, pipes and appurtenances will be tied into Myrtle Street to the north and Main Street to the west. The proposed water line off Myrtle Street will run through the proposed parking lot to a fire hydrant and travel east around the site eventually terminating at Main Street to the southeast. The surface and groundwater at the site will not be subject to draw down for use of drinking water, etc., minimizing environmental impacts.

Based upon a review of available information, the closest reported domestic well identified by MassDEP's Well Locator Viewer adjacent to the site are as follows:

- Community Groundwater Wells ID# 3014000-08G, 3014000-04G, 3014000-05G and 3014000-09G (located at Howe Street near the Hopkinton Reservoir, Asland Massachusetts) which are approximately 2.59 miles away from the site.

Based upon review of available information, the project will not adversely affect the on-site resource areas in regard to the interests for the protection of existing and potential domestic water supplies.

2.6 Species of Special Concern in Massachusetts

A review of the current MassGIS data layer for the Massachusetts Natural Heritage Atlas (effective August 1, 2021) under the Natural Heritage & Endangered Species Program (NHESP) indicates that no portion of the Site is located within Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species.

2.7 Historic Structures of Historic Areas

According to the Massachusetts Cultural Resource Information System (MACRIS), the entire site is located within a mapped historic area identified as Dwight Printing – Lombard Governor Plant (Historic Building Detail ID: ASL.D) significant for Architecture; Commerce; Industry; and Military. There are four (4) additional and subsequent areas within the site that are significant to the Architecture and Industry, identified as the following:

- Dwight Printing – Lombard Governor Building Nos. 2 and 3 (ID: ASL.200),
- Dwight Printing – Lombard Governor Building No. 1 (ID: ASL.201),
- Lombard Governor Building #5 (ID: ASL.202) and
- Lombard Governor Building No. 6 (ID: ASL.203).

The Site is currently developed with a collection of two- and three-story post-Civil War granite mill buildings, which are historically significant. Over time, the original mills have been supplemented by a series of warehouse-style brick structures that lack the architectural integrity and value of the original mill buildings. The existing conditions comprise approximately two acres of building space, with an additional two acres of impervious pavement used for surface parking, loading, and site circulation. As previously mentioned, the proposed design includes the preservation and restoration of the two northernmost mills, which will be repurposed for commercial and retail uses.

Based on the provided information, the proposed massing and exterior aesthetic of the project is complimentary to the two existing mill buildings and the New England row house concept; two architectural styles that are common to the region and contextually appropriate for a site with a history of light industrial use. Regularized large openings on the facade combine with simple, coherent masses that respond to the light industrial vernacular. The new four-story rowhouse volume is set in alignment with the existing buildings, helping to reinforce a contiguous rhythm and street presence along Main Street. Light gray brick veneer compliments the old granite vernacular of the mills without mimicking, while private front entry stoops, contemporary window bays, and mansard roof details respond to the adjacent residential neighborhoods.

2.8 Road Salt and Fertilizer Loading

According to the Applicant, the proposed stormwater management system is designed to meet the requirements set forth in the MassDEP Stormwater Management Handbook standards and the WPA regulations at 310 CMR 10.00. Additional erosion control measures are proposed to ensure no contaminants enter the surface water or groundwater via discharge and the proposed project is designed to eliminate untreated discharges. Additionally, the proposed project has been designed to incorporate the following:

a. Deicing Materials: The amount of sand and deicing chemicals shall be kept at the minimum amount required to provide safe pedestrian and vehicle travel. If stored on-site, sand and deicing chemicals shall be stockpiled under covered storage facilities that prevent precipitation and adjacent runoff from coming into contact with deicing materials. Stockpile areas shall be located outside resource areas. In addition, street cleaning will occur biannually to reduce sediment loading.

b. Organic Fertilizers: Pesticides and/or herbicides of any type shall not be used for the establishment or maintenance of landscape plantings or lawns. Use of fertilizers shall be limited to organic-based, slow-release fertilizers in compliance with the MA Plant Nutrient Application Requirements, 300 CMR 31.00. Fertilizer application rates shall not exceed the most recent UMass Guidelines for Nutrient Management which currently specifies a maximum application rate of two pounds of Nitrogen (N) per 1,000 square feet of turf per year. This restriction shall be included in all landscape construction and maintenance contracts. To meet this requirement, the intent will be to comply with the following requirements:

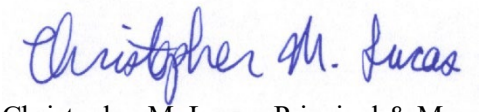
- Apply at a rate and in amounts consistent with manufacturer's specifications;
- Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;
- Avoid applying before heavy rains that could cause excess nutrients to be discharged;
- Never apply to frozen ground;
- Never apply to stormwater conveyance channels with flowing water; and
- Follow all other federal, state, tribal, and local requirements regarding fertilizer application.

3.0 CONCLUSION

For the reasons outlined above, the proposed project will have minimal impacts to surface and groundwater quality, groundwater recharge, wildlife habitats and corridors, wetlands and bodies of water, existing and potential domestic water supplies, species of special concern, historic structures or historic areas, or road salt and fertilizer loading, and is designed in compliance with the WPA and regulations at 310 CMR 10.00, the MassDEP Stormwater Management Standards, and other applicable state and federal regulations.

If you have any questions, please do not hesitate to contact me at 617.405.4140 or cml@lucasenviro.com. Thank you for your consideration in this matter.

Sincerely,
LUCAS ENVIRONMENTAL, LLC



Christopher M. Lucas, Principal & Manager, PWS, CWS, RPSS
Environmental Consultant/Wetland & Soil Scientist

cc: SLV Ashland, LLC (electronic copy)
Development Team (electronic copy)