

April 13, 2021

Christian Klein, Chairman Zoning Board of Appeals

Town of Arlington 50 Pleasant Street Arlington, MA 02476

Re: 1165R Massachusetts Avenue - Arlington, MA
Wetlands / Resource Area Regulatory Peer Review Update

Dear Chairman Klein:

BETA Group, Inc. (BETA) has completed its second Wetlands / Resource Area Regulatory peer review of the proposed Chapter 40B residential development located at 1165R Massachusetts Avenue in Arlington, Massachusetts. Our analysis of the environmental related elements of the site plans and supporting documents for the above-referenced project are based on selected materials from the following available documents:

- Response to Wetlands/ Resource Area Regulatory Peer Review April 1, 2021, prepared by Krattenmaker O'Connor & Inger P.C. Note that responses were not provided to all comments in our March 11, 2021 letter.
- Response to Conservation Committee Letter April 1, 2021, prepared by Krattenmaker O'Connor & Inger P.C.
- Proposed Site Plan Documents Proposed Residential Development (16 Sheets), including:
 - Development Plans: Sheets 1 through 12, dated February 17, 2020, revised through April 1, 2021, prepared by Bohler Engineering; and,
 - Existing Conditions Plans: Sheets 13 16 dated July 16, 2020, prepared by Control Point Associates, Inc.
- Landscape Drawings (3 Sheets), Sheets L101 and L102 dated April 1, 2021; Sheet L103 dated March 23, 2021, prepared by Kyle Zick Landscape Architecture of Boston, MA, prepared by Nitsch Engineering.
- Bridge Plan & Elevation "Progress Print" (1 Sheet) dated January 15, 2021, prepared by Nitsch Engineering;
- Proposed Exhibit Plan (Sheet 1 Riverfront Exhibit), dated March 8, 2020, prepared by Bohler Engineering;
- Proposed Exhibit Plan (Sheet 2 AURA Exhibit), dated March 8, 2020, prepared by Bohler Engineering;
- FEMA Flood Insurance Study, Middlesex County, Revised June 6, 2016;
- Town of Arlington Zoning Bylaw with amendments through April 2019; and
- Town of Arlington Wetland Protection Bylaw, Article 8 and Regulations for Wetland Protection, March 1, 2018.

General

BETA's comments presented here relate to the current project plans and figures available with respect to how the project complies with the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00, and the Town of Arlington Wetland Protection Bylaw Article 8 and Regulations for Wetland Protection (the Bylaw). BETA's second Civil / Stormwater peer review comments will be provided in a stand-alone letter report.

BETA provided comments to the Zoning Board in a letter dated March 11, 2021. This letter provides follow-up review of supplemental information submitted by the Applicant on April 5, 2021. Our follow-up comments are comments are denoted as "BETA1" in bold. We have also noted comments for which no response was received.

Proposed Project

A Comprehensive Permit Application was filed with the Arlington ZBA under the M.G.L Chapter 40B provisions in June 2020 for the proposed construction of 130 residential units in four (4) apartment buildings, along with associated access driveways, parking areas (total of 11 surface spaces) and garages, utilities, infrastructure, a Riverwalk, and stormwater management system improvements (the Project). The Project also proposes a new vehicular bridge over Mill Brook and proposes to re-route Ryder Brook.

Vehicular traffic into the Project Site will be from Massachusetts Avenue only, while vehicles exiting the Project Site can leave via Massachusetts Avenue or Ryder Street. The driveway connecting the Project Site to Ryder Street will only allow for one-way traffic.

<u>BETA1:</u> The re-routing of Ryder Brook has been revised to propose a longer stream channel and planting plans have been provided. In addition, the revised plans have located the Riverwalk further away from Mill Brook where possible.

Existing Conditions

The proposed Chapter 40B Residential Development is located at 1165R Massachusetts Avenue and includes two parcels that total approximately 2.3-acres of land, located between Ryder Street, Massachusetts Avenue, Quinn Road, and the historic Boston and Main Railroad (now the Minuteman Commuter Bikeway) in Arlington, Massachusetts (the Project Site). The Project Site is generally within an industrial/commercial area in Arlington and is bounded to the north, east, and south by Automotive business; and to the east by Construction/Contractor facilities and a condominium. Both Ryder Street and Forest Street (located to the west of the Project) are primarily residential neighborhoods.

The Project Site was originally developed in the 1800s as a mill and is almost entirely degraded. It is improved by former mill buildings, parking areas, and a single-lane vehicular bridge over Mill Brook. The onsite buildings are interconnected via breezeways and have undergone additions since the original development of the property.

A recreational field, rail trail, and small area of open green space exist to the east of the Project Site. These areas are the primary open space within approximately a quarter of a mile. An intermittent stream (Ryder Brook) flows southwest through the center of the Project Site to a 24" culvert that discharges to Mill Brook. Mill Brook is a perennial stream (river), which flows southerly through the Project Site and is bordered on both sides by a vertical retaining wall. Ryder Brook is a regulated resource area under the local Bylaw only.



Surface topography west of Mill Brook generally slopes steeply southeasterly toward the river. East of Mill Brook, the topography is relatively flat, but slopes south/southwest to Ryder Brook and Mill Brook. Although the Project Site is situated within a heavily developed area, Mill Brook, Ryder Brook, and the offsite Minuteman Rail Trail have been noted as locally important corridors for wildlife movement through the Town of Arlington.

The Project Site contains several resource areas Subject to Protection under the Act, its Regulations, and the Bylaw:

- Bank to Mill Brook (Perennial Stream),
- Bank to Ryder Brook (Intermittent Stream Jurisdictional under the Bylaw only),
- Land Under Mill Brook,
- Land Under Ryder Brook (Bylaw only),
- Bordering Land Subject to Flooding associated with Mill Brook,
- 200-foot Riverfront Area to Mill Brook,
- 100-foot Adjacent Upland Resource Areas (AURA) associated with Mill Brook and Ryder Brook (Bylaw only) and,
- 100-foot Buffer Zone to on-site Areas Subject to Protection under the Act and Bylaw.

A review of the current FEMA Flood Insurance Study for Middlesex County and the existing conditions topography presented on current Project plans indicate that the 100-year floodplain Base Flood Elevation associated with Mill Brook changes significantly, dropping from Elevation 103 feet north of Ryder Street to Elevation 90 feet at the southern limit of the Project. Based on the elevations of the top of the retaining walls that contain Mill Brook, the 100-year FEMA flood is contained within those walls. The existing northern driveway, however, is located within the 500-year flood plain Zone X. FEMA Floodway is also mapped along Mill Brook.

<u>Regulatory Compliance – Project Review</u>

The Project will require an Order of Conditions from the Arlington Conservation Commission for work in areas Subject to Protection and Jurisdiction pursuant to the Massachusetts Wetlands Protection Act, M.G.L. Chapter 131, Section 40 (the Act) and its Regulations (310 CMR 10.00). Based on the Comprehensive Permit Application, the Project is in the preliminary development stage and details describing the impacts on the interests identified in the Bylaw and its Regulations are not defined at this time. Specific details, such as quantification of impacts to Areas Subject to Protection and Jurisdiction as well as, locations of temporary construction impact, including staging areas, erosion controls, restoration efforts, and dewatering (if required), will need to be provided to adequately evaluate how the Project activities will affect areas protected under the Act and the Bylaw.

Based on BETA's review of the available Project plans, documents, and publicly available information, we respectfully provide the following comments and recommendations.

1. Plan Sheet EC-1, "Existing Conditions Plan" dated August 7, 2020, of the RDA filing and Sheet 1 of the Existing Conditions Plan Set (Record Survey) shows the current Bank delineations for both Ryder Brook and Mill Brook. As determined by a Negative Determination of Applicability issued by the ACC, Ryder



Brook is not Subject to Protection under the Act, however, it is protected by the Bylaw¹. BETA reviewed and concurred with the Bank (to perennial stream) boundary shown on the plans flagged as Series RB1 to RB10 and RB101 to RB112 (for Mill Brook) under the Act and the Bylaw, as well as the Bank (to intermittent stream) boundary shown on the plans flagged as Series SB1 to SB6 and SB101 to SB106 (for Ryder Brook) under the Bylaw.

Applicant's Response 4/1/2021: No response provided.

BETA1: No response needed.

2. In accordance with 310 CMR 10.58(6)(k), the ACC determined that portions of the Project Site qualify as a Historic Mill Complex as depicted on Sheet EC-2 – *Pre-1946 Mill Complex Footprint Exhibit* of the *Proposed Site Plan Documents* – *Proposed Residential Development* plan set and are therefore exempt from the Massachusetts Rivers Protection Act and the Riverfront Area General Performance Standards under 310 CMR 10.58(4) and (5).

Applicant's Response 4/1/2021: No response provided.

BETA1: No response needed.

- 3. Plan Sheet EC-2, "Pre-1946 Mill Complex Footprint Exhibit," dated September 21, 2020 depicts two distinct areas within the Project Site that do not qualify for the Historic Mill Exemption under the Rivers Protection Act and are within the 200-foot Riverfront Area (RA) associated with Mill Brook. These areas are:
 - a. The portion of the Project within the Ryder Street right-of-way (ROW) from the Forest Street intersection to the Site driveway and,
 - b. A 24,355± SF portion land in the northeast corner of Site, extending southeast from the property boundary to the southern Bank of Ryder Book and approximately 150 feet southwest from the property boundary.

Impacts to the portions of the Site that are not within the Historic Mill Complex footprint must comply with the Performance Standards at 310 CMR 10.58(4) and (5), as applicable. Specifically,

a. The proposed activities within the Ryder Street right-of-way are entirely within previously developed/degraded Riverfront Area, as defined under 310 CMR 10.58(5). To meet the RA performance standards at 310 CMR 10.58(5), work in this area must improve existing conditions, must not be closer to the river than existing conditions and cannot result in an increase in degraded RA.

¹ In accordance with Section 2 of the Town of Arlington Wetland Protection Bylaw, Streams are protected. Section 4 (71) of the Arlington Protection Bylaw Regulations defines a Stream as "A body of running water, including brooks and creeks, which moves in a definite channel in the ground due to hydraulic gradient, and includes streamlets and rivulets. A portion of a stream may flow through a culvert or beneath a bridge. Such a body of running water which does not flow throughout the year (i.e., which is intermittent) is a stream."



b. Although the majority of the property in the northeast corner of the Site is a parking lot and qualifies as degraded under 310 CMR 10.58(5), Ryder Brook and its immediate vicinity is vegetated. Work within this 24,355± SF area cannot increase the amount of degraded area; however, this work can be permitted if RA restoration is provided in accordance with 310 CMR 10.58(5)(f).

Recommendation: The Applicant should provide the ZBA with an evaluation of the Project's compliance with the Riverfront Area performance standards for the portions of the Site that do not qualify as Degraded RA that addresses the restoration requirements for impacts to non-degraded Riverfront Area under 310 CMR 10.58(5)(f & g). BETA suggests increasing native vegetation density near Mill Brook to provide shading and wildlife habitat. The planting locations and species selected for this area should consider the light available for growth of the species and the proximity of the root zone to the Mill Brook retaining walls, to protect the stability of the retaining walls.

<u>Applicant's Response 4/1/2021:</u> BETA1: [See pages 1-5 of the Applicant's Response letter. Response was not transcribed to save space.

<u>BETA1:</u> The Applicant provided an evaluation of the Project's compliance with the Riverfront Area Performance Standards. This evaluation was conducted on a Site-wide basis, meaning the evaluation reviewed the impacts and improvements within Areas #1 and #2 (as described on Page 1 of the Applicant's Response Letter), collectively. Overall, the revised Project will increase pervious surfaces and native vegetation within the onsite Riverfront Area by 5,261 square feet, solely within Area #2. Additional improvements may be possible within Area #1 (Ryder Street).

The Conservation Commission will ultimately determine whether the Project meets the Riverfront Area Redevelopment Standards under 310 CMR 10.58(5), however, the evaluation submitted to the ZBA seems reasonable.

- (a) Planting plans should be updated to include species suitable for upland Riverfront Area. Ryder Brook is an intermittent stream, and therefore will not receive flow year-round. Plant section should consider the soil moisture needs of the species and should consider resiliency. The plant species selected are those that need the groundwater to be at or near the ground surface during the growing season.
- (b) Provide a proposed monitoring protocol to document establishment of the restoration area, including invasive species control.
- (c) Evaluate opportunities to improve the Riverfront Area within Area #1 (Ryder Street). Potential improvements could include stormwater management improvements such as installation of deep sump catch basins or water quality units.



4. Work associated with construction of the bridge over Mill Brook may require fill below the 100-year / Base Flood Elevation. Section 23 of the Bylaw requires flood storage compensation ratio of 2:1^{2,3}.

<u>Recommendation</u>: The Applicant should provide preliminary bridge elevation plans that depict the proposed bridge structure in relation to the floodplain elevation to confirm the Project will not result in fill of the 100-year floodplain.

<u>Applicant's Response 4/1/2021:</u> The proposed bridge will be built on the existing channel walls and will be above the 100-year floodplain elevation. Accordingly, there will be no impact nor filling of the 100-year floodplain. See the preliminary bridge elevation plan, Exhibit 4 in the Appendix.

<u>BETA1:</u> Preliminary bridge plans have been submitted, however, the bridge plans do not depict topography and the bridge elevation/cross-section drawing does not show the Mean High Water Elevation or the 100-year FEMA Floodplain boundary/elevation. Although it appears the Project will not place bridge structures below the 100-year Floodplain/BLSF, the 100-year floodplain elevation should be depicted on the elevation drawing to confirm.

Recommendation: Depict the 100-year floodplain elevation on bridge elevation drawings.

5. The Mill Brook channel has a mapped FEMA Floodway. The Project proposes construction of a bridge over the designated Floodway. If work associated with the bridge construction requires placement of any structures or hanging utilities below the Floodway elevation, consultation with FEMA will be required to confirm a No-Rise Condition.

<u>Applicant's Response 4/1/2021:</u> The proposed bridge design does not include any permanent construction below the FEMA floodway elevation.

<u>BETA1:</u> The response provided does not indicate whether there will be any temporary work within the FEMA Floodway and the plans do not depict the extent or elevation of the Floodway.

- (a) Determine whether the Project will temporarily impact the FEMA Floodway and provide temporary flood control measures, if needed.
- (b) Revise plans to depict the extent and elevation of the FEMA Floodway.
- 6. The Site Layout, Grading and Drainage, and Landscape Plans show impacts to the Banks and Land Under Water associated with Ryder Brook, and the AURA associated with both Ryder Brook and Mill Brook. The current Plans do not provide the extent of impacts to the Banks or Land Under Water. Intermittent and perennial streams are significant to the interests of the Bylaw.

³ Section 23, D states the Commission may permit activity on land subject to flooding shall provide compensatory flood storage for all flood storage volume that will be lost at each elevation...at a 2:1 ratio minimum, for each unit volume of flood storage lost at each elevation.



² In accordance with Section 23, C of the Town Bylaw, "No activity, other than the maintenance of an already existing structure, which will result in the building within or upon, or removing, filling, dredging or altering of, land subject to flooding shall be conducted without written permission of the Conservation Commission." And

Section 20(C) of the Bylaw prohibits activities that will alter, fill or remove Bank, other than maintenance of an existing structure or Resource Enhancement activities. The Bylaw provides additional protection within the AURA zones associated with all streams (Section 25). Ryder Brook's Banks are currently vegetated with Japanese knotweed (*Fallopia japonica*); however, the Banks provide cover for wildlife movement between the rail trail, adjacent open space, and Mill Brook.

Recommendation: Quantify impacts to Bank and Land Under Water and consider providing a naturalized open stream channel for Ryder Brook in its proposed location through the Project Site. Per the Bylaw, this work could be considered "Resource Enhancement", as long as the constructed Banks and adjacent upland (as available) are densely vegetated with native vegetation that provides escape cover, nesting opportunities, food sources to native wildlife, and possibly pollinator habitat. The streambed material should be specified for the purposes of potential habitat for local wildlife, as well as flow velocity. This Resource Enhancement feature may eliminate the need for a Waiver from the Bylaw for this Project design element.

Applicant's Response 4/1/2021: The daylighted portion of the Brook will be increased from 120 feet to 200 feet, with the amount of Bank resource area increased from 249 linear feet to 363 linear feet. The amount of stream bed (equivalent to Land Under Waterway resource area, "LUW") will be increased from 816 square feet 1,880 square feet. The vegetated buffer adjacent to the Brook will be increased from 1,38 square feet to 2,975 square feet, and importantly, the vegetation will be changed from nearly all non-native invasive species to 100% native species. The vegetation will provide a variety of wildlife habitat functions, including cover, seed and berry sources, and nectar for pollinators. The riprap substrate and coir fascine logs will provide a variety of cover microhabitats for aquatic insects, small mammals, snakes and amphibians. These improvements clearly constitute a "Resource Enhancement" in accordance with the Wetlands Bylaw.

<u>BETA1:</u> As stated in the Applicant's response, the linear footage of Bank and square footages of streambed and vegetated AURA will be increased by the Project. BETA agrees with the use of coir fascine logs to restore the Banks of Ryder Brook, however, the use of riprap as a streambed substrate is not recommended unless substantiated by the design engineer and environmental consultant. No stream cross sections or details of the stream restoration are provided.

The proposed plant species selected for the streambank and AURA planting consist primarily of wetland indicator species. Ryder Brook is an intermittent stream, therefore, the soil conditions and groundwater elevation during the growing season may not be suitable to support the proposed species without significant irrigation during and following the establishment period. Irrigation is not a resilient or sustainable practice and should not be required after the initial establishment period in "Restoration Areas" if appropriate vegetation is selected. In addition, several proposed species are particular about growing conditions and water quality, which may impact successful establishment (ex. Chamaecyparis thyoides – Atlantic white cedar).

- (a) Provide streambed cross sections that depict coir fascine log installation.
- (b) Provide a streambed substrate that is more natural than riprap. The proposed streambed material should be selected based on anticipated stream velocity and could include sand and/or river stone.



- (c) Review the selected plant list to determine the appropriateness of the selected species for the Proposed soil conditions to avoid the need for irrigation beyond the initial plant establishment period.
- 7. Work proposed within vegetated areas of the 25-foot No Disturbance Zone includes relocation and potential restoration / enhancement of Ryder Brook, construction of Building 4, a new vehicular bridge over Mill Brook, a Riverwalk, planting beds, and lawn areas. Construction details and information describing impacts to the AURA zones have not been provided.

<u>Recommendation</u>: The Bylaw provides additional levels of protection to areas adjacent to resources that are not provided in the Act. The Applicant has not yet provided sufficient information for the ZBA to make an informed decision to grant Bylaw Waivers.

Applicant's Response 4/1/2021: See Exhibit 5 in the Appendix, which shows a comparison of existing conditions within the AURA of Ryder Brook and a comparable AURA from the proposed relocated, improved brook. The amount of pervious surface within the 0-25' portion of the AURA will be increased from 2,482 square feet to 4,404 square feet, an increase of 2,124 square feet. In the 0-100' AURA, the amount of pervious surface will be increased from 2,650 square feet to 7,660 square feet, an increase of 5,010 square feet. The vegetated buffer adjacent to the brook will go from almost entirely non-native species to 100% native, wildlife-friendly species.

<u>BETA1:</u> The Applicant has provided an evaluation of the impacts to the AURA associated with Ryder Brook, which appear to demonstrate a net improvement within the AURA to this stream (if species selected for the stream are appropriate (see Comment 7, BETA1).

No evaluation was provided, however, on the impacts to the AURA associated with Mill Brook. Additional improvements to the AURA of Mill Brook appear feasible. No reasoning has been provided on the need for the four parallel parking spaces along the driveway to Ryder Street. There appears to be an opportunity for planting trees and other vegetation within this area to mitigate for the impacts to the Mill Brook AURA.

The planting plan specifies planting bulbs and perennials beds along the Riverwalk. Given the three to five-foot wide planting area, this area may be suitable for planting shrubs, which would provide some limited shading along Mill Brook.

- (a) Provide an evaluation on the impacts to the AURA associated with Mill Brook.
- (b) Evaluate the potential for planting shrubs within the planting beds along the Riverwalk.
- 8. The AURA, a protected Bylaw resource area, is measured 100 feet horizontally lateral from the boundary of areas Subject to Protection under the Act and Bylaw. AURA is significant to the interest of the Bylaw, and is found to provide several functions and values significant to Bylaw including wildlife habitat. Section 25 of the Bylaw defines two levels of protection within the AURA, a No Disturbance Zone

⁴ The Arlington Bylaw defines AURA as the area 100 feet horizontally lateral from the boundary of any of the following Resource Areas: marsh, freshwater wetland, vernal pool, wet meadow, bog, swamp, bank, stream, creek, pond, reservoir, or lake, or resource area defined in Section 2.A(1) through (4) of the Bylaw.



measured 25-feet horizontally from the resource area and a Restricted Zone measured 75-feet horizontally from the No Disturbed Zone.

<u>Recommendation</u>: The Bylaw applies the AURA to certain resource areas, including the Bank to intermittent and perennial streams, to ensure protection of the interests identified in Section 1 of the Bylaw⁵. Based on BETA's Site inspection, the AURA on this Site is generally degraded and has limited function. Impacts to AURA that is vegetated should be quantified and any change in impervious area within the AURA should be quantified in accordance with Section 25(F) of the Bylaw Regulations.

<u>Applicant's Response 4/1/2021:</u> See the Applicant's respond to BETA's recommendation immediately above.

<u>BETA1:</u> As stated in Comment 7, BETA1, the Applicant has not provided an evaluation of the Project's impacts on the AURA associated with Mill Brook. In addition, the change in impervious area within the AURA is not quantified in accordance with Section 25(F) of the Bylaw.

Recommendations: Provide impacts quantification as described in original comment.

9. Vegetation removal within Areas Subject to Protection and Jurisdiction under the Act and Bylaw, including Bank, AURA, RA, and Buffer Zone, will be occur because of the Project. These resource areas are presumed to be significant to the interests of the Bylaw⁶. The Plan provides general site landscaping but does not include information on vegetation removal or replacement within protected areas.

<u>Recommendation:</u> The Applicant should provide the specific criteria for removing vegetation and replacement strategies outlined in Section 24 - Vegetation, B through H of the Bylaw. The proposed plans appear to provide greater area for planting than existing conditions, so the Project may be able to meet, or come close to meeting, the specific Bylaw performance standards.

<u>Applicant's Response 4/1/2021:</u> The project environmental consultant, Dan Wells of Goddard Consulting, has reported that 90% of the existing vegetation is non-native. The proposed swale design increases the watercourse length and is planted with 100% native species. See the attached layout and materials plans and site swale plan, Exhibits 3 and 6 in the Appendix.

The planting plan for the replacement vegetation provides for a greater area for plantings than the existing conditions and satisfies the standards set out in Section 24 – Vegetation, Sections B-H of the Bylaw.

⁶In accordance with Section 24 A vegetation within resource areas is significant to the protection of wildlife, wildlife habitat, and water quality.



⁵ Section 1, B of the Bylaw states "areas subject to protection under the Bylaw are to be regulated in order to ensure the protection of the following interests: public or private water supply, ground water supply, flood control, erosion control and sedimentation control, storm damage prevention, other water damage prevention, prevention of pollution, protection of surrounding land and other homes or buildings, wildlife protection, plant or wildlife habitat, aquatic species and their habitats, and the natural character or recreational values of the wetland resources (collectively, "Resource Area Values" or "Interests of the Bylaw")."

<u>BETA1:</u> The Applicant has not provided sufficient detail to document compliance with the standards in Section 24 – Vegetation, B through H of the Bylaw Regulations. In addition, the planting plan for the Site (Sheet L102) specifies the use of several wetland species near the retaining walls along Mill Brook, however, soil and groundwater conditions may not be appropriate for establishing wetland vegetation (see Comment 3, BETA1).

<u>Recommendations:</u> Provide an evaluation that documents compliance with Section 24 – Vegetation, B through H of the Bylaw Regulations.

10. BETA notes that the existing trees on the site growing out of the Mill Brook retaining wall may need to be removed to prevent future damage to the wall. To mitigate this removal, smaller shrubs can be planted near the top of the wall and trees can be planted with adequate setbacks to the wall. Additional vegetation will provide shelter, shade, and perch habitat over the brook to replace what is lost from tree removal. Vegetative shading along the river's retaining walls will help mitigate the rise in surface water temperature from the stone retaining walls.

<u>Recommendation:</u> Include additional vegetation replacement with consideration to shading of Mill Brook and improvement to native wildlife habitat.

<u>Applicant's Response 4/1/2021:</u> The tree removal at the top of Mill Brook originally proposed will not be proceeding. The surveyors have determined that those trees, which sit in close proximity to the Property line, are actually on the abutter's property. The Applicant does not have the lawful authority to remove these trees.

<u>BETA1:</u> Based on Sheet L101 of the Landscaping Plans and BETA's Site Visit, there are approximately five trees in this area that will no longer be removed. Tree protection measures should be specified on the Demolition plans for this area. Sheet L101 also depicts a proposed screening fence through the trunks of the trees to remain, which may need to be relocated to avoid impacts to the trees.

Additional plantings, including shrub species, should be considered within the planting beds along the Riverwalk

- (a) Specify tree protection measures where proposed on the Demolition Plans.
- (b) Review fence location to ensure no interference with existing trees.
- (c) Include shrub plantings in the landscaped beds along the Riverwalk to help increase shading along Mill Brook.
- 11. The Banks of Ryder Brook are minimally vegetated but may provide wildlife habitat value for urban species. Wildlife habitat is significant to the interests of the Bylaw⁷ and vegetated resource areas, including vegetated Banks, are protected by buffers of the AURA zones. Construction activities that

⁷ In accordance with Section 30 – Wildlife Habitat - Activities which alter the Wildlife Habitat of any Resource Area in a manner that is likely to impact the breeding success of wildlife are prohibited.



alter vegetated resource areas are assumed to affect wildlife habitat and breeding, which is prohibited under the Bylaw⁸.

<u>Recommendation:</u> The Applicant could provide dense native plantings adjacent to the relocated Ryder Brook stream and throughout the Project Site near Mill Brook. Additional plantings in the landscaped areas will mitigate impacts to existing habitat features and enhance the Site's ability to provide wildlife habitat.

<u>Applicant's Response 4/1/2021:</u> The proposed swale for the Property includes all native plantings with far greater habitat value than the existing non-native vegetation on the Property. Please reference the layout and materials plans and the swale plan, Exhibits 3 and 6 in the Appendix.

<u>BETA1</u>: See BETA1 Comments for 3, 6 and 7. Plant species should be selected based on soil and sun exposure conditions for the individual planting locations. Taller plant species should be considered within the planting beds along the Riverwalk and surface parking spaces should be eliminated if possible to increase canopy planting.

Requested Waivers

The Applicant has requested a waiver from ten (10) provisions in the Wetland Protection Bylaw and Regulations. The provisions for which a wavier has been requested are presented below in Table 1, along with BETA's comments on the purpose and need of each request.

<u>BETA1:</u> The Applicant did not provide responses to BETA's waiver request evaluation. Where needed, updated responses are provided in Table 1, labeled "BETA1".

Table 1 - Waiver Request Summary for Arlington's Wetland Bylaw and Regulations

Proposed Provisions to be Waived	Comments on Waiver Request
Regulations, Section 4 – Definition of Stream	Applying only the State definition of a stream would not change the ability for the Project to be permitted, therefore this waiver is not required to
	permit the Project. BETA1: BETA's comment stands.
Regulations, Section 20C –	As described in Comment 6 above, this waiver may not be necessary
Bank Performance Standards	because the stream relocation could qualify as Resource Enhancement, as long as certain criteria are met.
	BETA1: BETA's comment stands. If/when the species proposed are suitable for the Site conditions, the stream relocation portion of the Project may qualify as Resource Enhancement for Bank.

⁸ Section 30 – Wildlife Habitat Activities which alter the Wildlife Habitat of any Resource Area in a manner that is likely to impact the breeding success of wildlife are prohibited.



Regulations, Section 22 – Land Under Water Bodies	This waiver would not be necessary if the stream relocation qualifies as a Resource Enhancement. In addition, activities that alter Land Under Water are allowed if the Commission provides written permission, even if the
Performance Standards	work is not considered Resource Enhancement.
	BETA1: BETA's comment stands. If/when the streambed substrate proposed is natural and is selected for the anticipated stream flow and velocity, the stream relocation portion of the Project may qualify as Resource Enhancement for Land Under Water Bodies.
Regulations, Section 24 – Vegetation Removal Performance Standards	The Bylaw Regulations require the ACC to provide approval of vegetation removal and in-kind replacement. Vegetation removal is proposed along the Banks of Ryder Brook and Mill Brook; however, landscaping is proposed. The Applicant has not demonstrated that the Project cannot meet this standard. See Comment 9.
	BETA1: See Comment 9, BETA1. The Applicant states the Project meets the Vegetation Standards however, no evaluation has been provided to demonstrate compliance.
Regulations, Section 25D – 25' No Disturbance in AURA Performance Standards	Because the 25-foot area around Ryder Brook and Mill Brook is previously developed, under this section the Applicant is only required to restore the buffer to the greatest extent practicable and shall provide the same amount of vegetated area as exists now. Based on the Project plans, it appears the Project can meet this Standard to the Extent Practicable. Therefore, a waiver of this provision may not be required.
	BETA1: BETA's comment stands. Additional information is needed to determine whether the work within the 25-foot NDZ of Mill Brook complies with the standard.
Regulations, Section 25C – Alternatives Analysis for Work in 100-foot AURA	The 100-foot AURA is previously developed, and the Project has the ability to improve the AURA. The ZBA could consider this waiver, as the Site is previously developed, and Project is located almost entirely within the AURA.
	BETA1: BETA's comment stands, however, as described in BETA's comments above, there may be alternative layouts for the Site that could increase planting within the AURA to Mill Brook or avoid impacts to Ryder Brook.
	If the ZBA does not waive this provision, it is unlikely to have an impact on the Project's ability to be permitted, however, if not waived, the Applicant will be required to provide additional information describing Site alternatives during the NOI permitting process.
Regulations, Sections 25E &F – 50' No Build in AURA Performance Standards	Because the 50-foot buffer around Ryder Brook and Mill Brook is almost entirely developed, under these sections, the ACC can approve new structures within the 50-foot area as long as there is no increase impervious area and resources are improved. Based on the Project plans, it appears the Project can meet the local standards. Therefore, a waiver of this provision may not be required.



	BETA1: BETA's comment stands.
Bylaw, Section 4(b) – 200-foot undisturbed vegetation in RA	The Bylaw states that the Commission "may" require a 200-foot-wide area of continuous undisturbed vegetated cover. This provision of the Bylaw is not a required performance standard. Given the existing degraded conditions within the 200-foot Riverfront Area and ACC's comments on the Project to date, it is unlikely they would require a 200- foot undisturbed area. A waiver from this provision may not be necessary, however, it could be granted without significant impacts to the environment.
	BETA1: BETA's comment stands.
Bylaw, Section 16 and Regulations, Section 11 – Permitting and Consultant Fees	The applicant is requesting a waiver of 50% of the local filing fees. The filing fees for this project would fall under Section 11.A.4. "N3" of the Regulations (Multiple dwelling structures) and Section 16.B.5. of the Bylaw. The fees presented in these sections are not consistent. Granting this waiver would result in a decrease of local filing fees from around \$15,000 to \$7,500. BETA1: BETA's comment stands.
Bylaw, Sections 10 & 11 – Bond Requirements	The applicant is requesting a waiver of the bond requirements in the Bylaw. Given the proximity of the Project to the onsite resource areas, and the potential for the Project to impact Protected Resource Areas, BETA recommends retaining the right to require a performance bond, primarily related to the stream relocation portion of the Project. BETA1: BETA's comment stands.

Conclusions

The Project will require issuance of an Order of Conditions by the ACC under the Massachusetts Wetlands Protection Act and its Regulations. Because the Project has been filed under the M.G.L. Chapter 40B provisions, the ZBA administers the local Bylaws, including the Arlington Wetland Protection Bylaw, Article 8 and Regulations for Wetland Protection. The Applicant has requested that the ZBA waive specific sections of the Town of Arlington Wetland Protection Bylaw, Article 8 and Regulations for Wetland Protection.

Until the comments and recommendations presented above are addressed, BETA cannot fully advise the ZBA on the effects of granting the requested Waivers of the Town of Arlington Wetland Protection Bylaw, Article 8 and Regulations for Wetland Protection.

If you have questions about any of these comments, please feel free to contact me at any time. Thank you.

Very truly yours, **BETA Group, Inc.**

Laura Krause

Senior Environmental Scientist

Marta J. Nover, V.P. Environmental Sciences



cc: Jenny Raitt, Director of Planning and Economic Development Kelly Lynema, Senior Planner, Department of Planning and Economic Development Douglas W. Heim, Arlington Town Counsel

