









# Mill Brook Corridor Report

April 5, 2019

By the Mill Brook Corridor Study Group of the Master Plan Implementation Committee, with support from the Department of Planning & Community Development

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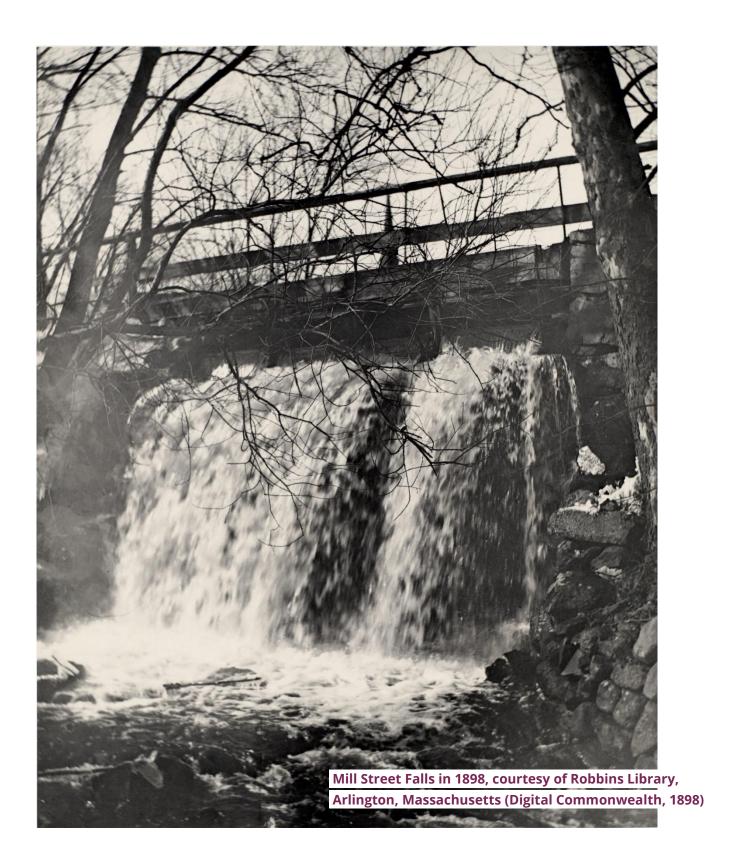
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### INTRODUCTION

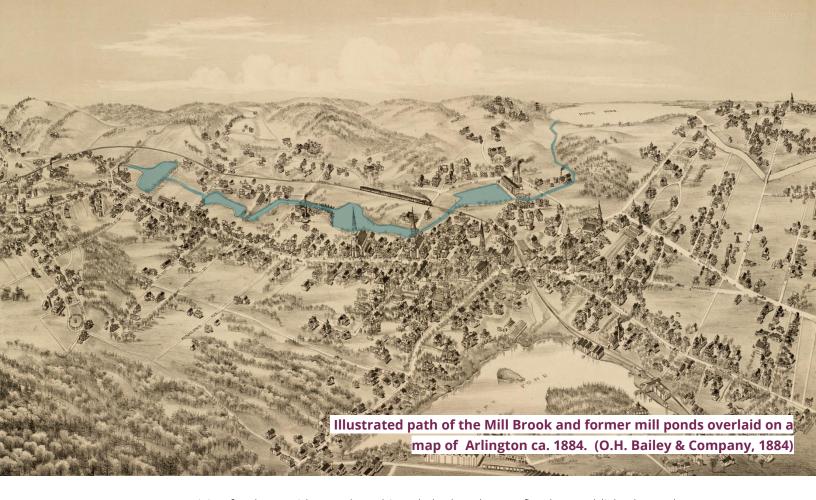
Mill Brook flows for nearly three miles from west to east through the center of Arlington, roughly parallel to Massachusetts Avenue and the Minuteman Bikeway, starting at the Arlington Reservoir in the Heights. Near Arlington Center the brook turns northward and flows through Mt. Pleasant Cemetery and Meadowbrook Park into the Lower Mystic Lake. It functions as part of the Mystic River Watershed and the drainage system that collects water from as far upstream as Arlington's Great Meadows in East Lexington.

As the source for at least eight water-powered mill sites and mill ponds during the 17th through 19th centuries, Mill Brook is a significant part of Arlington's cultural landscape and a link to its industrial history. Much of the brook is now channelized, with segments running through underground culverts and only limited views to the exposed sections of the waterway. Portions of the brook are subject to regular flooding largely because so much of it is constricted in narrow manmade channels.

Access points to visit Mill Brook are available in several Town-owned parks and cultural sites including Meadowbrook Park, Mt. Pleasant Cemetery, Cooke's Hollow Conservation Area, Wellington Park, the Old Schwamb Mill, Hurd Field, and the Arlington Reservoir. Other Town-owned lands that intersect with the brook's course, but are now culverted and thus inaccessible, include the Arlington High School property and Buzzell Field. More than 60 percent of the brook is located on private property and is mostly inaccessible.

The Town of Arlington has a long-standing vision for the Mill Brook Corridor, dating to Charles W. Eliot II's 1926 Town Plan and numerous subsequent studies. In 2010, the Open Space Committee prepared the Mill Brook Linear Park Report., which examined the feasibility and possibilities for expanding the Town's open space resources by developing a linear park along Mill Brook. Building on a 1977 landscape design for a linear park commissioned by the Conservation Commission, the 2010 report examined the brook in seven sections. The report's chapters on current conditions, challenges, and opportunities looked at environmental, recreational, flood control, economic, and transportation issues for each section of the brook.

This updated Mill Brook Corridor Report supplements information in the 2010 report and examines new opportunities to create a vision and identity for the corridor. Linking the seven sections together in a greenway with pedestrian facilities would facilitate access to help restore the environmental and scenic qualities of Mill Brook, and provide enhanced recreational opportunities for Arlington's residents. But before this long-held



vision for the corridor can be achieved, the brook must first be established as a clean, safe, and attractive feature of the community. Since 2010, the Town of Arlington has completed several significant planning studies, including the 2015 Master Plan and the 2018 Municipal Vulnerability Preparedness Assessment, which inform changing conditions along Mill Brook.

The Mill Brook Corridor Study Group, a subcommittee of the Town's Master Plan Implementation Committee, has been tasked with this update and has created an Action Plan that covers the following topics: environment and ecosystem management, flood control, recreation, economic development, transportation, historical context, and placemaking. The Action Plan will help the Town target initiatives that prioritize and improve Mill Brook, understanding that many factors limit the Town's ability to effect change in the near term. This report seeks to provide background information and context for any future planning to preserve the brook's important ecological and historical features and improve recreational opportunities within the corridor.

#### **Geographical and Historical Context**

Arlington's Great Meadows in East Lexington is a large wetland that contributes to the source and flow of water in Mill Brook. The brook is formed in Arlington Heights by the confluence of Munroe and Sickle Brooks (also known as Cataldo Brook), which flow south and east from Lexington and meet at the Arlington Reservoir outflow near Drake Village. Munroe Brook was dammed in the early 1870s to form the Arlington Reservoir, and two spillways now control the amount of water discharged into Mill Brook.

Mill Brook drops about 150 feet on its way from the Reservoir to the Lower Mystic Lake over a distance of about 2.7 miles. Mill Brook flows parallel to Massachusetts Avenue and the Minuteman Bikeway eastward to Arlington Center, where the brook turns northeastward to cross under Mystic Street and flow through Mount Pleasant Cemetery into Lower Mystic Lake. More than 40 percent of the brook is culverted below ground while 30 percent is



Mill Brook leaving the Reservoir. Courtesy of Robbins Library, Arlington, Massachusetts. (Davis, 1920)

channelized but exposed to daylight. Only a few short sections of the brook remain in a natural streambed with earthen banks. The entire brook is in need of substantial restoration and remediation to improve biodiversity, water quality, drainage, and flood control.

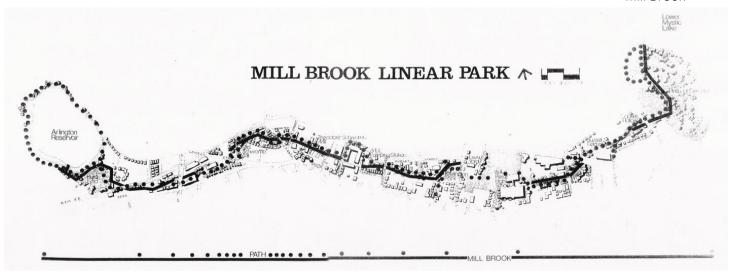
About 35 percent of the land within 100 yards of the brook is owned by the Town, and these public areas are used primarily for open space and recreational activities (e.g., playing fields, tennis courts, climbing wall, playgrounds, and parks). The areas not owned by the Town include industrial and commercial properties, some historical sites, and several residential neighborhoods.

Mill Brook was originally a natural waterway flanked by the hills surrounding the Boston basin. The English settled in the area in 1635, and by 1637 they began to make changes to the brook. Captain George Cooke erected a milldam near what is now Mystic Street to create a mill pond and operate a grist mill. From the 17th through 19th centuries Mill Brook supported as many as eight mill sites and a chain of dams and mill ponds from Arlington Heights to Mystic Street. At different times through those years the mills were



used for grinding (e.g., grain, spices, material for drugs, paints, and dyes) and other kinds of manufacturing (e.g., wood turning, cloth printing, knives, saw blades). The brook was also considered ideal for industrial waste disposal in the years before environmental protections were instituted.

When the Arlington Reservoir was built as a water supply in 1871, the reduction of water volume in Mill Brook caused many mill owners to convert to steam or later to electric power, or to abandon their locations altogether. Mill Brook has been channelized, diverted, and culverted in various ways and at various times over the past four centuries for purposes ranging from directing water flow for manufacturing use, to flood control, to the creation of playing fields. Areas that were once the main industrial features of the map of Arlington—its broad mill ponds—are now some of the most popular recreational features of the Town.



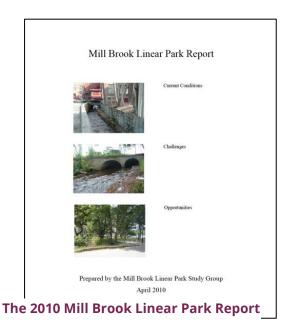
The 1977 vision for the Mill Brook as a linear park (de Lehrer, 1977).

#### Planning for a Mill Brook Linear Park

Proposals for restoring Mill Brook and creating a linear park along its banks date back to the 1920s. The Report on a Town Plan in 1926 by noted landscape architect Charles W. Eliot II recommended a series of pocket parks along Mill Brook. The Town subsequently acquired the Wellington Park property (3.0 acres) in the 1930s and Cooke's Hollow (0.7 acres) in the 1970s. During the 1970s, at the time of the Bicentennial and in response to urban development pressures, the Town undertook several studies, including "Arlington Center – Mill Brook Valley Plan," by Charles G. Hilgenhurst & Associates and the Department of Planning and Community Development (1975). A 1977 study for the Arlington Conservation Commission by then-Tufts University student Miriam (Mia) Guttfreund de Lehrer led to a general plan for developing a Mill Brook Linear Park, in response to the pocket park format.

As residential and commercial development increased in the Mill Brook district during the later decades of the 20th century, some special permit approvals were "conditioned" with requirements that could contribute to the linear park concept. Direction and momentum for the park was fragmented, however, as other community priorities prevailed. Arlington Park and Recreation Commission proposals for the Wellington Park area in 2007 brought renewed interest to the linear park concept.

An ad hoc group organized by the Open Space Committee in 2008 began to document the Mill Brook Corridor: determining parcel lines, lot ownerships, and current uses; photo-documenting the conditions of the brook and its nearby built neighborhoods; and outlining the potential for additional and enhanced access. The group's 2010 report took de Lehrer's 1977 plan as a starting point for updating and



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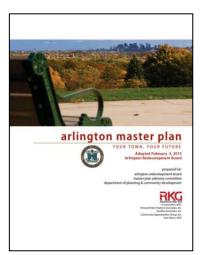
expanding the long-held vision that had not been actively pursued in the interim.

Other complementary initiatives around that time were the Open Space and Recreation Plan for 2007-2014, planning for a Battle Road Scenic Byway program and the Freedom's Way historic corridor, a 2009 report by Larry Koff & Associates on commercial development planning for the Arlington Redevelopment Board, and other ARB efforts to envision and promote a Mill Brook Study Area.

Since publication of the 2010 report, the Town has completed or is currently working on a host of planning and renovation projects on public and private lands in the Mill Brook Corridor. All of these projects (as of March 2019) offer opportunities to incorporate research and visioning to draw attention to this important historic, cultural, and environmental resource.

#### **Town-Wide Plans**

Three planning initiatives consider the Town of Arlington as a whole. With Mill Brook running as a spine through the community, it has received significant attention as part of the planning process.



#### Arlington Master Plan (2015)

The Town initiated an extensive master planning process in 2012 to explore and document a wide range of land use and development concerns and opportunities. The final report, Arlington Master Plan, was adopted in 2015 with numerous recommendations for future action, including a renewed look at the Mill Brook Corridor and all past studies. The neighborhoods surrounding the brook include the commercial centers of Arlington Heights and Arlington Center along Massachusetts Avenue, and the corridor parallels the Minuteman Bikeway and commercial areas of Dudley Street and Summer Street to the north. The brook and corridor thus provide the spine for a full range of economic, residential, and environmental life in the community. The adoption of the Master Plan set the stage for many of the initiatives identified below.

Following the adoption of the Master Plan, the Mill Brook Corridor Study Group was formed as a subgroup of the Arlington Master Plan Implementation Committee and is tasked with implementing the recommendations in the Master Plan that relate to Mill Brook. It includes representatives from the Arlington Redevelopment Board, Department of Planning and Community Development, Master Plan Implementation Committee, Old Schwamb Mill, Open Space Committee, Conservation Commission, Park and Recreation Commission, and other groups.

#### Open Space and Recreation Plan (2015–2022)

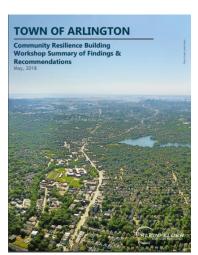
The 2015-2022 Open Space and Recreation Plan is focused on Arlington's existing open spaces and future open space and recreation needs, and it establishes open space policy for the Town. Since Mill Brook intersects with many of Arlington's open space and recreation facilities, the corridor received significant attention in the Plan. The Open Space Committee, in collaboration with the Department of Planning and Community Development and other groups, is in the process of monitoring the goals and objectives of the Plan, in anticipation of the next update in 2022.



#### Municipal Vulnerability Preparedness (MVP) Grant Process (2017-2019)

In 2017, the Commonwealth's Executive Office of Energy and Environmental Affairs awarded Arlington a Municipal Vulnerability Preparedness (MVP) Planning Grant in the amount of \$23,000 to complete a community resilience planning process to address the local impacts of climate change. At the heart of the process was a Community Resilience Building Workshop, which involved community members and other stakeholders in the development of a vulnerability assessment and identification of action steps to build greater local resilience. The Mill Brook Corridor was identified as a primary local flood hazard and vulnerable natural resource, and as being central to future efforts to build greater local resilience.

In the spring of 2018 the Town of Arlington was awarded a follow-up Municipal Vulnerability Preparedness (MVP) Action Grant of nearly \$400,000 to develop and implement ecologically sensitive flood management measures along the brook in Wellington Park. This project piggybacks an ongoing revitalization project in the park under the auspices of the Mystic River Watershed Association (see below). A primary purpose of the MVP project is to provide additional flood storage capacity along the Mill Brook, as well as to address the need for bank stabilization and protection of public utilities, and the desire for public access and connectivity to the Mill Brook.



#### Site-Specific Projects

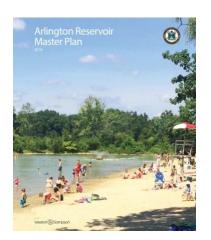
Since the Mill Brook Corridor transects the entire community, it passes through a wide variety of land uses, each with their own challenges and opportunities. Two projects, at Wellington Park and the Arlington Reservoir, are site-specific efforts to address the challenges of the corridor while capitalizing on its opportunities. Two other major redevelopment projects that intersect with Mill Brook are reconstruction of the Department of Public Works facility on Grove Street and the proposed rebuilding of Arlington High School.



**Wellington Park site** 

#### Wellington Park/Mill Brook Corridor Revitalization Project

The Mystic River Watershed Association and Department of Planning and Community Development (DPCD) are coordinating an initiative to revitalize the portion of Mill Brook between Brattle and Grove Streets, with a specific focus on Wellington Park. The goal is to create a design that revitalizes the brook and its vicinity ecologically, civically, and economically in a manner respectful to abutters. The design and first implementation phases have been supported by Community Preservation Act funds. Public participation, and especially input from residents of the Mill Brook and Rembrandt condominiums and other abutters, is vital to this process. Weston & Sampson has been hired as the design and engineering consultant for the design and assessment phase. This project is occurring in parallel with the MVP project described above.



#### **Arlington Reservoir Master Plan**

The purpose of this master plan is to develop a Reservoir improvement plan that reflects the recreational and conservation needs of a diverse community. This plan will serve as a guide for all future development of the Reservoir as well as a tool to strategize for funding opportunities. This project is headed by the Park and Recreation Commission, Conservation Commission, and Reservoir Committee, with funding from the Community Preservation Act Committee. Weston & Sampson has been hired as consultants to undertake a public process and conduct research to evaluate existing conditions, complete a land survey and environmental assessment of the water body and shoreline habitats, develop infrastructure and landscaping recommendations, and establish a final preferred plan for the Town to operate and manage the property going forward.

#### Department of Public Works Renovations and Sewer Rehabilitation Project

The DPW yard and garage buildings have experienced routine, sometimes severe, flooding, and the gas utility site adjacent to 51 Grove Street has had to rebuild

retaining walls due to combined runoff from the exposed section of Mill Brook, Grove Street and the bikeway. Renovations to the DPW yard could include redirecting water flow toward the High School playing fields to the east and reducing the runoff directly into the brook from these paved areas, as well as opportunities for daylighting part of the brook and the addition of historic and educational signage.

A second related DPW project to rehabilitate sanitary sewers seeks to reduce the amount of groundwater (infiltration) and rainwater (inflow) entering the sewer system. Through this program, sources of Infiltration and Inflow (I/I) will be identified and removed. When these sources are removed, the quantity of flow entering the Arlington sewer system and the risk of sewer backups and overflows will be reduced. These engineering improvements will also benefit the water quality of Mill Brook.

#### Arlington High School Building Project

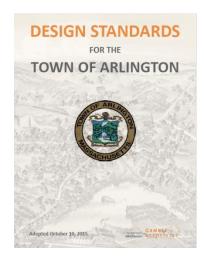
Major renovations of the High School buildings and facilities over the next several years will encompass all aspects of planning and renovation/construction, including potential impacts on Mill Brook, which is culverted under the playing fields. This project offers opportunities to incorporate some daylighting of the brook where it enters and leaves school property, improved linkages to Minuteman Bikeway, and other historic and educational initiatives to draw attention to this long-hidden section of the brook.



Arlington High School schematic site plan

#### **Design Standards**

In 2015, the Town adopted design guidelines for major corridors in the community, including Massachusetts Avenue and Broadway, the Minuteman Bikeway, and the Mill Brook Corridor. Arlington's Design Standards provide direction for the design of new development and redevelopment in the commercial and industrial areas. The design standards are focused in seven areas: building setbacks, building height, public realm interface, parking and access, connections and linkages, façade and materials, and signage and wayfinding. For the Mill Brook Corridor, the design guidelines suggest that new development or redevelopment must be designed in a manner that simultaneously capitalizes on its natural beauty and history, and its potential as a publicly accessible pedestrian corridor, but also protects the site against flooding.



#### **Educational Efforts**

Providing opportunities for the community to learn about Mill Brook, its history, and its ecosystem are important ways to draw attention to the need for planning around the corridor. These two examples are opportunities to have the community-at-large invest in the brook and support future efforts.

#### Mill Brook Clean-Ups

Volunteer-based trash clean-ups of various portions of the brook occur on a semiannual basis (or more frequently), and are coordinated by the DPCD, DPW, Town committees, the Mystic River Watershed Association, and/or other locally active groups, such as the Mill Brook Corridor Study Group.

#### Old Schwamb Mill Exhibit

An historical review of Mill Brook, "A Brook Runs Through It: Arlington's Mill Brook Legacy," will be on exhibit at the Old Schwamb Mill from September 2018 through early June 2019. This exhibit presents an opportunity to bring renewed attention to the history of the brook and how it drove economic development in the Arlington's early history, and how it can be restored as an ecological and cultural resource for the entire community.

From 1637 until around 1900, Arlington's Mill Brook was bustling with industrial activity, ranging from early grist and saw mills to large-scale manufacturers of saws, wheat meal, and calico printing. The original source of water power from the cascading brook was gradually replaced by steam and then electricity during the late 19th and early 20th centuries, but this fast-moving brook is the reason for Arlington's growth since the early colonial period.

This exhibit provides an historical overview of the Mill Brook and its legacy of mills and mill owners, mill ponds, and the amazing variety of products invented and produced in Arlington. The final part of the exhibit looks at efforts over nearly 100 years to protect and restore the Mill Brook Corridor as an ecologically healthy linear park linking public open spaces with the parallel transportation routes of the Minuteman Bikeway, Massachusetts Avenue, and Summer Street.



# **CURRENT CONDITIONS**

The following descriptions of current conditions in the Mill Brook Corridor maintain the format of the seven sections outlined in the 1977 and 2010 linear park reports cited previously. These sections are identified on the map below:

- 1 Arlington Reservoir to Park Avenue
- 2 Park Avenue to Forest Street
- 3 Forest Street to Brattle Street
- 4 Brattle Street to Grove Street

- (5) Grove Street to Mill Street
- **6** Mill Street to Mystic Street
- Mystic Street to Lower Mystic Lake



#### Section 1. Arlington Reservoir to Park Avenue

Mill Brook is formed in Arlington Heights by the confluence of Sickle Brook (also known as Cataldo Brook) coming out of Arlington's Great Meadows in East Lexington and Munroe Brook, which flows both into and out of the Arlington Reservoir. Mill Brook begins at the confluence, under a low concrete bridge across Sickle Brook between Drake Village and the Reservoir dam. The outflow from the Reservoir is controlled by an adjustable gate near this area, which is under the management of the Arlington Department of Public Works (DPW).

For its first 1,000 feet Mill Brook snakes roughly eastward through Town-owned properties. It follows the contours of the Reservoir and is bordered on the south by Drake Village, a housing complex owned by the Arlington Housing Authority for elderly and other residents, and by the Hurd/Reservoir athletic fields, managed by the Recreation Department. Both sides of this section are bordered by a narrow stretch of trees and undergrowth. The north side the bank is steep (it is part of the Reservoir dam) and does not allow direct access to the brook.

On the south side there is a chain-link fence between Drake Village and the brook, with a gate at the bridge and a narrow dirt footpath between the fence and the brook. Erosion has exposed many of the concrete fence post footings, which may be in danger of toppling. There is no fence between the Hurd Field parking area and the brook, though several concrete barriers create an unattractive obstruction to brook access. In 2013, a



rain garden was built next to the parking lot, and a section of the lot was converted into a pervious surface to control stormwater runoff.

Another taller section of chain-link fence runs between the brook and the playing fields. Though it may be necessary to keep balls (and kids chasing them) out of the brook, it is unattractive and not well kept. This fence and the trees around it are severely overgrown with oriental bittersweet, Japanese Knotweed, and other vegetation, obstructing the view. Fallen tree branches, undergrowth, and trash also obstruct the water flow in some areas.

About two-thirds of the way along Hurd Field, a bridge across Mill Brook allows access to the Wildlife Habitat Garden and Reservoir recreational area to the north. This concrete and stone structure has four large pipes (about 2 feet in diameter) under the paved walkway. The concrete is starting to crumble in some places and the pipes are an obstruction point for leaves, branches, and other debris. During flooding events, the water often flows over or around the bridge.

A few dozen yards beyond the bridge, the emergency spillway from the Reservoir empties into Mill Brook from the north. The spillway is partially paved with vertically set hollow cement blocks. When it was constructed in 2005, the hollows were filled with gravel. Soon after construction, a large storm caused water to flow through the spillway, sweeping gravel down over the unpaved area and into Mill Brook. The gravel was removed from the brook, and over time soil has collected and plants are growing in the hollows of those blocks. This flat area is used to store and drain water chestnuts harvested from the Reservoir each summer, and it is a frequent hang-out area for teens. Trash and graffiti tend to collect in this area.

In 2010 and 2011, the Reservoir Committee of Envision Arlington (formerly known as Vision 2020) worked with the DPW and other Town entities to create a Wildlife Habitat Garden on both sides of the new spillway. This garden is maintained by committee volunteers and has become a valued attraction in the area.

On the south side of the brook along the playing fields, the vegetated border widens. The brook previously meandered south through farmland but, when the Colonial Village apartment complex was built in the 1960s, the brook was moved and forced into a right angle turn inside a concrete and stone channel running along the western and southern edges of the development. This unnatural flow causes regular flooding problems. Water cannot move quickly in a narrow, sharply turning channel, so when the brook is high and water comes rushing from the Reservoir spillway toward Colonial Village, it hits the concrete wall head-on and pours into the adjacent parking lot. Splash-over from smaller storms is contained in the parking lot by an unattractive row of cement barriers and

sandbags. Large and destructive storms in recent years (i.e., 1996, 2006, 2010) have dumped several feet of water into the lot and flooded basements in the adjacent buildings.

At the southern end of the Colonial Village property, the concrete channel makes two more sharp turns, which send the brook flowing east again between Colonial Village and a large historic farmhouse with outbuildings. The channel flows south again, making a wide angle before the east end of Colonial Village. After a few yards, the brook flows through the culvert under the Minuteman Bikeway and continues east on the south side of the bikeway, bordering the Sunrise Assisted Living property. Fencing and overgrown vegetation prevent direct access to the brook in this section.

The brook continues flowing east behind the MBTA Bus Station on Massachusetts Avenue, which is the terminus of several bus routes (including 77 and 79) and a junction to bus routes extending into Lexington. The brook is in a narrow channel as it passes alongside the Arlington Coal and Lumber Company to the north and behind a row of businesses fronting on Massachusetts Avenue to the south. At Park Avenue, the brook passes into a culvert under the roadway. During flood conditions, this culvert backs up and water flows over the lumber yard and on to the bikeway.



Flooding at Colonial Village (White, 2010)

#### Section 2: Park Avenue to Forest Street

East of Park Avenue, Mill Brook continues in a somewhat natural setting for about 600 feet behind businesses on Massachusetts Avenue to the south and the boundary of the large industrial complex to the north, where Gold's Gym and other businesses are located next to a parking area. The southern bank of the brook here is characterized by a very steep and overgrown incline behind the parking lots of Penzeys Spices, D'Agostino's and other stores on Massachusetts Avenue. The northern side of the brook borders



the parking lot and is lined with huge stone slabs and boulders. Further east the brook passes into a large culvert under the commercial buildings and adjacent parking lots.

The brook continues in the culvert under Lowell Street and emerges at the Watermill Place condominium property, where the banks are landscaped with boulders, wood mulch, trees, and other plantings. This attention to maintaining the brook and banks on private property provides a welcome relief to the usual neglected and constricted stream banks. The brook passes under Mill Lane into an open channel behind the historic Old Schwamb Mill and its landscaped garden. The channel disappears again into a culvert through a residential neighborhood and reappears in the back yards of houses on adjacent streets, and then passes into a culvert under Forest Street.

In the garden behind the Old Schwamb Mill building are interesting remains of a water control sluiceway that was probably used to control the flow of water after it exited an underflow waterwheel in the mill's basement. This was the original source of power for the many belt-linked machines located in the mill, which still manufactures wooden oval picture and mirror frames.

For several hundred years, a number of mills operated along the whole length of the brook, relying on the energy force of the swiftly running water to turn huge water wheels and divert water through sluiceways. All of the working mills except for the Old Schwamb Mill have disappeared, due in part to construction of the upstream reservoir, which significantly reduced the source and flow of water after 1871. Many mills converted to steam boilers and later to electricity. However, competition from other areas in the United States finally forced most of the mills to shut down by the early 20th century. Only the Old Schwamb Mill remains in operation today. The loss of the mills and mill ponds created a drastic change in the landscape and land uses all along Mill Brook.



#### Section 3: Forest Street to Brattle Street

From the east side of Forest Street, Mill Brook flows in a narrow channel through both residential and industrial areas. It passes first through a short fenced-in residential stretch and then into a culvert under Ryder Street. It reappears in an open channel that flows past a condominium building on Ryder Street to the south and a Mirak-owned industrial area to the north and east. Access in this area is limited by private property uses, overgrown vegetation, and fencing along the channel's edge.



Mill Brook flows through an open channel near the Theodore Schwamb building (Southwick, 2018).

The former Theodore Schwamb Mill at 1165-1167 Massachusetts Avenue, now owned by the Mirak Automotive Group, includes several former mill buildings. As a sign of changing uses, Workbar is renting space for a new affordable and flexible co-working endeavor that has attracted many small-scale independent professionals, startups, remote employees, and entrepreneurs. The brook flows through an open channel for most of its course here, but runs under a roadway behind an overhead walkway between two buildings of the mill complex. The brook opens up again in the channel on the east side of the Theodore Schwamb building, passing through parking lots and industrial land behind the buildings. The brook is visible from various spots abutting the Mirak car dealerships and service center off Ouinn Road and Hobbs Court.

Between Hobbs Court and the eastern boundary of the Old Colony apartment complex, Mill Brook is culverted again as it passes under adjacent parking areas. The brook emerges on the other side of a stockade fence in a deep, narrow channel as it passes between a line of single- and two-family residences on Laurel Street to the south and the Massachusetts Water Resources Authority (MWRA) pumping station and another commercial building to the north. A short section of the brook next to the commercial building is covered by associated parking areas. Just before passing under Brattle Street, the brook again enters an open channel that borders residential properties on both sides for a short distance.

#### Section 4: Brattle Street to Grove Street

From Brattle Street, Mill Brook meanders in a natural streambed toward Wellington Park and Grove Street. The brook is visible, but its banks are heavily wooded and overgrown on both sides. Some of the banks are steep and can be difficult to navigate on foot. On the south side, Mill Brook is bordered by condominium complexes fronting on Massachusetts Avenue; on the north side are houses and apartment buildings on Dudley Street near both cross streets, with many small-scale industrial properties in the middle of the block.



One of the many outflows into the brook can be seen behind the condominium properties, while on the north side there is a great deal of debris, including piles of rocks, cement blocks, asphalt, bricks, fencing, and other trash. Approximately halfway between Brattle and Grove streets, a wooden bridge spans the brook allowing access in both directions. The bridge was built during the development of The Rembrandt condominiums as a condition of the developer's building permit. The bridge is in relatively good condition, though it does have some graffiti. The fencing along the south side of the brook is falling and in disrepair.

The banks on the north side are also fairly steep, and rubble and debris from the industrial properties on Dudley Street are perched precariously behind failing fencing and retaining walls. There is a real danger that rocks and other debris could cascade down the banks and into the brook, taking trees and brush with them. Downstream from the bridge, the brook is channelized within sloped cement and rock walls in need of repair. An old chain link fence overgrown with invasive weeds separates the brook from the Wellington Park recreation area.

On the south bank near the bridge, access to the brook is available from Prentiss Road, which connects to Massachusetts Avenue. Much of the land that borders both sides of the brook in this area behind the tennis courts is owned by the Town, but has been neglected and is overgrown with invasive Japanese Knotweed and other vegetation. Wellington Park is an active recreational area with its primary access from Grove Street. The park borders the south bank of the brook, separated by dilapidated chain-link fencing, and contains a climbing wall and tennis courts.

Near the intersection of Dudley and Grove streets, the brook is narrowly channeled between a single-family residence and the parking lot of two apartment buildings. A fence overgrown with vegetation blocks the view from Grove Street to the brook. The brook then flows under the street and emerges on the other side into a narrow channel on the Town's DPW property.

This section of Mill Brook is being studied in two related design and engineering projects, as described above. Work on the environmental and flood control aspects of the MVP project will be undertaken in the spring of 2019, and continuing design and implementation work on the CPA-funded revitalization and recreational project overseen by the Mystic River Watershed Association and the Department of Planning and Community Development is also underway.





Photos (L-R): Wooden pedestrian bridge spanning the brook by Wellington Park; Mill Brook by Brattle Street (Mill Brook Linear Park Report, 2010).

#### Section 5: Grove Street to Mill Street

Continuing from the culvert under Grove Street, Mill Brook becomes visible briefly at the Arlington DPW facility, and then enters a long culvert beneath the Arlington High School property. The brook daylights at the east end of the High School parking lot near a small pocket park, and then parallels Mill Brook Drive to Mill Street, passing near Brigham Square Apartments and a medical office building at 22 Mill Street. The brook then passes under Mill Street and into the Millbrook Square residential complex.



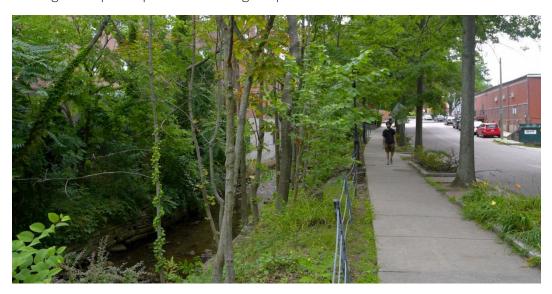
In 2010, 30-50 Mill Street, a former restaurant and industrial site, was redeveloped into Brigham Square Apartments. Improvements to the pocket park were incorporated into this initiative, resulting in landscaping and hydrological improvements along with new walkways and upgraded lighting and seating. The park edge slopes gently down to the brook, providing an opportunity to view and access the water's edge.

Mill Brook Drive offers an attractive vista between the brook and pocket park to the north and the landscaped parking areas and steep wooded bank to the south, which abuts residential and commercial properties on Massachusetts Avenue. During the construction of CVS at 833 Massachusetts Avenue, vegetation was added to the bank and bio-retention features were incorporated into the parking lot's design.

A sidewalk next to the brook includes brick and granite components, and is bordered by a row of trees. A bridge over the brook was improved as part of a 2010 redevelopment project, providing views of the water and surrounding features. There are several weeping willow trees in this area, including a large, prominent one, but much of this stretch of brook is overgrown.

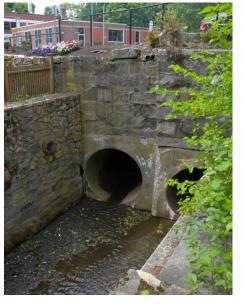
The entrance to the building at 22 Mill Street includes a dramatic overlook onto the brook and an outside sitting area. This handsome, four-story brick building, originally home to the Frost Insecticide Company, was completed in 1909. Its front sidewalk on Mill Street includes a large brick paved area with a sycamore tree that is over 100 years old. The intersection of Mill Street, Mill Brook Drive, and the brook is a key vantage point for viewing and accessing the brook, and it is in close proximity to the Minuteman Bikeway and Massachusetts Avenue.

Current capital improvement projects at the DPW yard on Grove Street and the High School offer opportunities to revisit this critical section of the brook, which has long been hidden from view and is known primarily by the names on Mill Brook Drive and apartments. The improvements to the pocket park during the recent development of the Brigham Square Apartments are a good precedent for other such initiatives.





Photos (clockwise from top): Mill Brook Drive; dam site on Mill St; the brook at Mill St. and Mill Brook Dr. (all by Southwick, 2018).



#### Section 6: Mill Street to Mystic Street

Mill Brook is uncovered in a channel as it emerges and flows eastward from Mill Street. The edges of the channel are heavily vegetated and bordered by the Millbrook Square apartment complex on the south. A pedestrian path parallels alongside and above the north bank of the stream from Mill Street to the point where the brook enters a large masonry construction about twenty feet below the surrounding land. A small park has a dilapidated sitting area that offers views of the brook, but is often littered with trash. Twenty-two

Mill Brook Corridor Section 6

steps connect this path to the Minuteman Bikeway, allowing some access, but presenting an obstacle for individuals with limited mobility.

Mill Brook flows in a culvert for about 1,000 feet under Buzzell Field, a corner of the Russell Place residences, and a separate playing field belonging to Arlington Catholic High School (ACHS). Much of this area was a former mill pond for a series of mill sites, including Cooke's grist mill and Fowle's Wheat Meal factory on Mystic Street. The pond was finally drained and filled to create the playing fields in the 1930s. There is considerable pedestrian traffic through the fields and a major pass-through point at the end of Water Street, which leads to Russell Street and the bikeway, and eventually to the point where the brook appears again at Cooke's Hollow. At this location, Water Street once continued along the top of a mill dam to Summer Street.

Mill Brook exits the culvert east of the ACHS playing field at Cooke's Hollow and behind an Arlington Housing Authority apartment building. It drops down into a six-foot waterfall, the only such feature remaining in Arlington. The Police Department building also abuts the park. With access from Mystic Street, Cooke's Hollow provides some open space and a pedestrian path along the northern side of the brook. Limited on-street parking is available along Mystic Street.





Photos (L-R): Behind Mill Brook Square; Cooke's Hollow (both by Southwick, 2018).



#### Section 7: Mystic Street to Lower Mystic Lake

After crossing under Mystic Street in a narrow culvert, Mill Brook continues in a channel between several commercial properties. The brook then flows through parts of Mount Pleasant Cemetery and, though it is visible, it is not easily accessed because its banks are steep and, in some locations, the brook is culverted or fenced. Visitors can walk around the cemetery grounds and there are ample opportunities for vehicle access and parking.

Mill Brook then meanders through Meadowbrook Park, which is one of the least developed areas of the brook, and which affords valuable opportunities to observe birds and other wildlife. Particularly notable is the spring herring run that occur in this portion of the brook. Pedestrian access is available on either side of the park, but the wetlands and stream channel prohibit walking between the sides of the brook. Cemetery roads provide vehicle access along the western and southern sides of the park.

Mill Brook then flows out of the wetlands and under the Mystic Valley Parkway before emptying into Lower Mystic Lake. Downstream from the wetlands, the brook's banks are steep, rocky, and eroded. A major elevated sewer line of the Massachusetts Water Resources Authority restricts pedestrian passage between the parkway and Meadowbrook Park. There is a pedestrian path along the lake side of the parkway, though crossing the parkway at this location is unsafe due to high numbers of fast-moving traffic. The remains of a dam that was used to flood Meadowbrook Park for winter ice skating are visible at the edge of the parkway.

The brook meanders through Meadowbrook Park before emptying into Lower Mystic Lake (LeRoyer, 2018).





## PRIORITIES AND RECOMMENDATIONS

This section identifies actions by their priority:

- ongoing priorities or actions that recur on a monthly or annual basis;
- recommendations for property owners, or realistic actions individuals who own property along the corridor can take to help improve the Mill Brook and its environs; and
- **near-term priorities**, or actions that are either currently in progress or should be commenced in 2019;
- **mid-term priorities**, or actions that either depend on the completion of nearterm actions or require additional time, planning, or identification of funding sources; and
- **long-term priorities**, or actions that will be needed but can be deferred, actions requiring participation by multiple departments, boards and committees, and property owners, or those that require more planning work or significant sums of money.

Going forward, implementation of the priorities identified below will be critical to the preservation of the Mill Brook. Taking action on these items will help preserve the brook's ecological and historical features, while improving the recreational opportunities in the corridor.

#### Ongoing Priorities

- Work with volunteers, boards, and committees to continue annual volunteer cleanup events to clear the streambed and banks of trash, vegetative overgrowth, and large natural debris hazards through the Land Stewards program, various park friends groups, and other entities.
- Continue working with volunteers to address invasive species along the Mill Brook Corridor.
- Collaborate with Mystic River Watershed Association (MyRWA) to support their monthly water quality sampling of the Mill Brook.
- Leverage the Conservation Commission permitting process to improve conditions on private property where possible.
- Support ongoing application of the Mill Brook Corridor Design Guidelines by the Arlington Redevelopment Board.

- Support the Historic Districts Commission in their application of Design Guidelines for Local Historic Districts.
- Monitor and work to implement objectives in the Open Space and Recreation Plan that relate to the Mill Brook Corridor.

#### Recommendations for Property Owners

There are simple, inexpensive actions that owners of private property along the Mill Brook Corridor can take to help improve the Brook's cleanliness and safety. The strategies listed below can go a long way in reducing stormwater runoff and improving local water quality:

- Limit the use of fertilizers, pesticides, and herbicides on lawns.
- Install rain barrels.
- Reduce the surface areas covered by asphalt or concrete.
- Pick up pet waste.
- Use a car wash facility rather than washing vehicles in driveways or streets near or adjacent to the brook.
- Do not dump anything down storm drains.
- Clear storm drains of litter, leaves, and snow.
- Add vegetation to bare spots on lawns.

#### **Near-Term Priorities**

#### Complete Phase 1 of the Wellington Park/Mill Brook Corridor Project



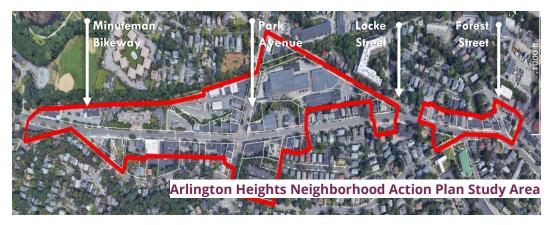
Schematic plan for redevelopment of Wellington Park

A joint initiative between the Planning and Community
Development, Engineering, and Recreation departments and the
Mystic River Watershed Association, this project commenced in
summer 2018. Construction work occurred between March and
June 2019. The project is funded through the Commonwealth's
Executive Office of Energy and Environmental Affairs' Municipal
Vulnerability Preparedness (MVP) Action Grant of nearly \$400,000.

Phase 1 of the project includes invasive species removal, repaving the path along the brook, construction of a timber pathway and overlook, and creation of a flood storage channel.

#### Complete the Arlington Heights Neighborhood Action Plan

The Department of Planning and Community Development Department is leading this initiative, which was completed in spring 2019. The Action Plan touches on areas in sections 1 and 2 of the Mill Brook Corridor.



The Arlington Heights planning project is a continuation of the work done by Support Arlington Heights at a community meeting in the summer of 2016. This work is funded through by MAPC and the District Local Technical Assistance program and ties together recommendations from the 2015 Master Plan and the Arlington Arts and Culture Plan by exploring ways of spurring revitalization of Arlington Heights.

#### Support implementation of Phase 1 of the Arlington Reservoir Master Plan

Completed in 2018 by the Reservoir Working Group with consultant Weston & Sampson, the Arlington Reservoir Master Plan identifies a number of actions related to recreation, environmental, and water quality that directly impact the Mill Brook Corridor.

In 2019, the Town will commence phase one of work recommended in the Master Plan. CPA funding was approved for targeting a water treatment system for the beach area, which is old and close to failure, along with funding for a pilot project to restore 60 linear feet of the trail next to LexFarm.

# Continue to implement the Municipal Separate Storm Sewer System (MS4) Permit Process to improve water quality and contain contaminants

This is a joint initiative between the Engineering and Planning and Community Development departments. Implementation of the MS4 Permit Process began in 2018, and is a long-term effort that will continue for the next 40 years.

Arlington is one of more than 200 Massachusetts towns and cities that discharge stormwater under the U.S. EPA's NPDES MS4 Permit. Under this 5-year permit, the Town

must meet six minimum control measures. Arlington reports its progress by sending in Annual Reports each May 1 to EPA and MassDEP. The six proposed actions for meeting minimum control measures are:

- Prevent pollution from municipal operations from entering the stormwater system and local water bodies.
- Develop an Illicit Discharge Detection and Elimination (IDDE) Program, which prohibits non-stormwater discharges from entering the stormwater system.
- Control runoff from construction sites.
- Control post-construction runoff through enforcing best management practices.
- Educate the public on stormwater management through outreach initiatives.
- Engage the community in stormwater management through public participation.

# Work to ensure improvement of Mill Brook Corridor conditions in upcoming Town building projects, specifically 51 Grove Street and the High School

Explore opportunities for implementing grading and water runoff quality improvements and executing bio-retention measures.

#### Mid-Term Priorities

- Complete Phase 2 of the Wellington Park/Mill Brook Corridor Project. This phase will augment the park's recreational amenities, including completion of the pedestrian path over the south and north banks of the park, retrofitting the existing pedestrian bridge for ADA compliance, and building another ADA compliant bridge on the east end of the park.
- Pursue an MVP implementation grant for flood mitigation at Hurd Field and where other opportunities arise.
- Work with appropriate Town entities develop an Invasive Species Management Plan, including an inventory and mapping of existing invasive species, developing an ongoing invasive removal plan, and identifying opportunities to encourage the proliferation of native and pollinator vegetation.
- Collaborate with the Engineering Department to continue their review of the Town's stormwater bylaw to more aggressively mitigate stormwater impacts of new construction and redevelopment.

#### **Long-Term Recommendations**

The benefits and action steps outlined below are grouped into seven categories: environment/ecosystem management, flood control, recreation, economic development, transportation, historical context, and placemaking. Many of these actions require substantial collaboration with private property owners and/or multiple Town departments, and therefore cannot be completed on a set timeline.

Actions are organized by category and, where appropriate, refer to which of the seven sections described under the Current Conditions section of this report the action specifically applies.

#### 1. Environment/Ecosystem Management

• Improve water quality through better monitoring and repairs of stormwater drains to reduce overflows and contain contaminants.

Section	Actions
All	Investigate and mitigate stormwater outflows and other potential
	pollution sources. (See MS4 Permitting Process in near-term
	priorities.)
4	In conjunction with the Wellington Park/Mill Brook Corridor Project
	and MVP Action Grant, develop a plan for building capacity for flood
	storage and removing invasive plant and replacing them with native
	species. (See Wellington Park/Mill Brook Corridor in near-term
	priorities.)
5	Work with the Department of Public Works to explore opportunities at
	51 Grove Street for implementing grading and water runoff quality
	improvements, executing bio-retention measures, and strengthening
	organic matter filter capabilities.

• Clean the streambed and banks of trash, vegetative overgrowth, and large natural debris hazards.

Section	Actions
All	Work with volunteers and owners of abutting properties to clean up
	trash and vegetal debris in Town-owned recreation areas, brook
	channels, and natural portions of the brook. (See Clean-up Events in
	ongoing priorities.)
	Provide education to abutting property owners about the dangers of
	lawn fertilizers and other pollutants that can leach into the brook.

- 2 Continue clean-up and landscaping efforts around Mill Lane by Watermill Place and Old Schwamb Mill.
- Stabilize the natural shoreline and streambanks to mitigate erosion.

Section	Actions
All	Add streambank stabilization components to natural and daylit portions of the brook to prevent erosion and stream blockages.
4	Redesign and landscape natural banks to absorb flooding during storm surges. (See Wellington Park/Mill Brook Corridor in near-term priorities.)

• Remove invasive species and encourage the proliferation of native and pollinator vegetation.

Section	Actions
All	Remove invasive plants and plant native species all along the brook
	and its banks. (See Invasive Species Management Plan in mid-term
	priorities and invasive species removal in ongoing priorities.)
	Inventory and map existing invasive species; develop ongoing invasive
	removal plan. (See Invasive Species Management Plan in mid-term
	priorities and invasive species removal in ongoing priorities.)
	Identify opportunities to increase biodiversity and enhance habitat.
	(See Invasive Species Management Plan in mid-term priorities and
	invasive species removal in ongoing priorities.)

• Incorporate long-term sustainability and vulnerability goals that complement any improvements.

Section	Actions
	Install equipment to permanently gather data on water levels, quality,
	and other metrics.

• Utilize findings of the Arlington Reservoir Master Plan related to water quality, water flow into the brook, and other ecological conditions.

Section	Actions
1	Coordinate environmental improvements with recommendations in
	the Reservoir Master Plan.

#### 2. Flood Control

• Enlarge the capacity of some restricted flow areas by removing natural blockages and widening or realigning channels and culverts.

Section	Actions
All	Maintain wide, free-flowing channels to facilitate water flow.
7	Identify strategies for enhancing the wetlands in Meadowbrook Park
	as a means of absorbing upstream floodwaters.

• Control bank erosion to prevent clogging of the brook with silt and rocks.

Section	Actions
All	Protect and stabilize natural banking.

 Recreate mill ponds, build rain gardens or bio-swales, and engineer other areas using ecologically sensitive means for natural and controlled bank overflow during storms.

Section	Actions
1	Create wider, more natural banks for overflows with rain gardens,
	bioswales, etc. to manage flooding into the Colonial Village apartment complex.
4	Work with Mystic River Watershed Association and MVP projects on
	implementing engineered wetlands and other measures. (See
	Wellington Park/Mill Brook Corridor in near-term priorities.)
6	Explore opportunities for utilizing Cooke's Hollow as a retention area
	for flood water.

 Encourage sustainable measures for accommodating stormwater runoff for building renovations, redevelopment, and new development in the corridor's vicinity.

Section	Actions
All	Improve the Town's stormwater bylaw to more aggressively mitigate
	stormwater impacts of new construction and redevelopment. (See
	Review Stormwater Bylaw in mid-term priorities.)
5	Install permeable pavement in the parking areas adjacent to the
	pocket park at Mill Brook Drive and at the DPW yards on Grove Street.
	(See MS4 Permitting Process in near-term priorities.)

Utilize findings of the Town's 2018 Municipal Vulnerability Preparedness
Assessment to implement recommended flood control measures. (See
Wellington Park/Mill Brook Corridor Project in near-term priorities.)

#### 3. Recreation

• Identify new opportunities for access to the brook.

Section	Actions
4	Collaborate with the Mill Brook Condominiums to explore next steps
	for a walking path along Mill Brook between Brattle and Grove Streets
	(feasibility study completed as part of the Wellington Park/Mill Brook
	Revitalization Project funded by Arlington CPA).
5	Identify new opportunities at the High School for access to the brook.
	(See High School Building projects in near-term priorities.)

• Create safe, accessible and attractive walking paths and gathering areas along the corridor.

Section	Actions
1	Repair/resurface current walking paths linked to the Reservoir, and consider new pathways around Hurd Field and the Reservoir to avoid cutting through the fields. (See MVP Grants/Hurd Field in mid-term priorities.)
	Clear invasive vegetation and repair/replace fencing along Hurd Field edges.
2	Explore opportunities to create walking paths and sitting areas through and around selected properties, especially at the now neglected natural brook area next to Gold's Gym.
3	Explore opportunities to create walking paths through and around selected properties as development opportunities arise.
4	Explore opportunities to create looping walking paths along the brook within the Town-owned area using the existing bridge and a new bridge. (See Phase 2 of Wellington Park/Mill Brook Corridor in midterm priorities.)
6	Restore a walking path alongside the Arlington Catholic field by removing some fencing or other measures to facilitate access.
7	Identify opportunities in Mount Pleasant Cemetery for additional pedestrian paths, as well as spaces for nature exploration and contemplation.

• Improve and increase the number of sitting areas and other amenities.

Section	Actions
All	Add landscaping, benches and other amenities along the brook edges
	on Town-owned properties and in collaboration with private owners
	where possible.
1	Add sitting areas as part of the renovations at Arlington Reservoir.
	(See Arlington Reservoir Master Plan in near-term priorities.)
4	Work with Town and Mystic River Watershed Association on other
	amenities, sitting areas, etc. as part of the revitalization project in
	Wellington Park. (See Phase 2 of Wellington Park/Mill Brook Corridor in
	mid-term priorities.)
6	Modernize sitting areas and lighting at Cooke's Hollow.

• Build or renovate children's play areas with both active play equipment and opportunities for nature exploration.

Section	Actions
1	Renovate the playground and recreation areas at the Reservoir. (See
	Arlington Reservoir Master Plan in near-term priorities.)
4	Explore ideas to enhance active and passive play/recreation in
	Wellington Park. (See Phase 2 of Wellington Park/Mill Brook Corridor in
	mid-term priorities.)
7	Explore opportunities for creating a restored area for ice skating at
	Meadowbrook Park.

#### 4. Economic Development

• Encourage inventive, sustainable and exciting new developments in the industrial district as well as adjacent business and residential districts.

Section	Actions
1 & 2	Coordinate with ongoing planning, zoning and economic development
	efforts in Arlington Heights to enrich the entire district and promote
	local businesses. (See Arlington Heights Neighborhood Action Plan in
	near-term priorities.)
3	Enhance connections with surrounding businesses and major
through	residential developments as opportunities arise.
6	

• Encourage the incorporation of attractive views, gathering areas, and other park elements in both existing and new development.

Section	Actions
All	Explore opportunities to open businesses to provide views of the
	brook and future walking paths as renovations and development
	opportunities arise.

• Build on existing commercial development studies and analyses.

Section	Actions
1 & 2	Work with ongoing studies of Arlington Heights business district to include access and links with the Mill Brook Corridor and nearby open spaces. (See Arlington Heights Neighborhood Action Plan in near-term priorities.)
5	Use the Brigham Square Apartments redevelopment as a demonstration project for how other redevelopment projects in the area can positively impact the Mill Brook Corridor.

• Create incentives and development guidelines for new and existing landowners and commercial users to implement corridor improvements, including signage.

Section	Actions
1 & 2	Explore opportunities for new businesses and mixed housing-
	commercial uses at the Park Avenue end of this section. (See Arlington Heights Neighborhood Action Plan in near-term priorities.)
	Heights Neighborhood Action Plan in near-term priorities.)
4	Explore how existing businesses on Dudley St could help improve Mill
	Brook Corridor.

• Focus on historical tourism and expand such activities in conjunction with other initiatives (Battle Road, Freedom's Way, etc.) See Action # 6 on Historic Context.

#### 5. Transportation

• Improve and expand connections and loops between the corridor and Minuteman Bikeway, including additional walkways along the brook.

Section	Actions
1	Create better signage and links to the Minuteman Bikeway at the south side of the Hurd and Reservoir fields.
	Facilitate walking and bicycle access between the brook and both the Minuteman Bikeway and Massachusetts Avenue.
	Improve access between the Minuteman Bikeway and the Lowell Street/Mt. Gilboa neighborhood via the Reservoir pathway system.

- 2 Facilitate improved access to and from the brook to both the Minuteman Bikeway and Massachusetts Avenue.
- Facilitate access from the brook to both the Minuteman Bikeway and Massachusetts Avenue at several places (i.e., Ryder Street, Old Colony apartments/Hobbs Court, Brattle Street).

Link the Bikeway and adjacent Summer Street Sports Complex, Ed Burns Arena, and Hill's Hill wooded area to new brook-side pathways.

- Identify opportunities for improving connections between the brook and the Bikeway at Prentiss Road, Dudley street Place, and/or Grove Street, with the understanding that the grade change makes connections difficult at these points.
- Identify opportunities for creating pedestrian and bicycle connections between the Minuteman Bikeway, Arlington High School, the pocket park, Mill Brook Drive, and Massachusetts Avenue.
- Facilitate bicycle and pedestrian connections through Buzzell Field and Arlington Catholic field to Mystic Street.
- Improve pedestrian access and safety in Mount Pleasant Cemetery and Meadowbrook Park.

#### Section Actions

- Investigate opportunities for constructing a dedicated pedestrian path between Mystic Street and Mount Pleasant Cemetery.

  Repair the pedestrian paths in Meadowbrook Park.

  Explore opportunities for a mid-block pedestrian crossing on Mystic Street between Cooke's Hollow and Mount Pleasant Cemetery.
- Highlight connections from Massachusetts Avenue and Summer Street to the brook pathways and the Bikeway via cross streets (i.e., Mill, Grove, Brattle, Forest, Ryder, Park).
- Improve pedestrian and bicycle links to public transportation facilities such as the Arlington Heights MBTA Bus Terminal and bus stops along Massachusetts Avenue.

#### Section Actions

1 Explore ways to improve the connection between the Bikeway and the MBTA Bus Station.

#### 6. Historical Context

 Highlight Mill Brook's heritage and identify the locations of many active mill sites, dams and mill ponds during the 17th through early 20th centuries.

Section	Actions
1	Highlight the history of the Reservoir from the 1870s through subsequent major changes, including the larger watershed starting in Arlington's Great Meadows.
	Add signage, historic maps and photos on display boards (see Reservoir Master Plan).
2	Focus attention on the Old Schwamb Mill, including the main building, barn and dry house, as well as the landscaped garden and Townowned park on top of a former mill pond.
	Note links to the historic Foot of the Rocks park and memorial on Massachusetts Avenue near the Mill.
	Highlight the locations of former mill ponds on the current Gold's Gym site and the former Lewis Mill near Park Avenue.
3	Highlight the locations of former mill ponds and mill sites, including Theodore Schwamb Mill and multiple mills and factories at Hobbs Court.
4	Highlight the location of the former Schouler mill pond and Schouler Calico Factory on this site.
5	Add signage that documents the former Welch & Griffiths saw factory, Gas Light company and other industrial uses on Grove Street. Add signage and documentation on Cutter's Pond (now most of the
6	High School property), Cutter's Mill and dam on Mill Street.
6	Add historic signage near the culverted segment of the brook under the Buzzell and Arlington Catholic playing fields that highlights the former Fowle's millpond and factory complex on Mystic Street.
	Enhance signage at Cooke's Hollow, the site of the area's first grist mill in 1637.
7	Improve signage describing the historical significance of Mount Pleasant Cemetery.

• Highlight the heritage landscape of the entire Mill Brook watershed from Arlington's Great Meadows in East Lexington to the Lower Mystic Lake.

#### 7. Placemaking

- Implement landscape improvements as opportunities arise to create a more visually appealing greenway.
- Utilize new signage, landscaping, public art and infrastructure to create a unified identity for the Mill Brook Corridor and its varied uses.

Section	Actions
All	Create new historic and wayfinding signage for the entire Mill Brook
	Corridor.
1	Coordinate with both the Reservoir Master Plan and Arlington Heights
	Neighborhood Action Plan to create a lively, attractive starting point of
	the Mill Brook Corridor. (See Arlington Reservoir Master Plan and
	Arlington Heights Neighborhood Action Plan in near-term
	recommendations)
5	Improve the streetscapes of Mill Brook Drive and Mill Street so that
	brook access is reinforced with signage, and the bridge is enhanced
	with handrails, sidewalk improvements, and attractive street paving.
	Transform the pocket park next to the High School into a vital node
	along Mill Brook, which celebrates and builds upon the natural
	landscape and seamlessly interfaces with surrounding uses.

• Consider daylighting portions of the brook that are now culverted and implementing other measures to enhance access and viewsheds and to build greater local resilience to climate change impacts.

Section	Actions
All	Daylight parts of the brook that are now channelized or culverted.
5	Work with the High School Building Committee and others on possibilities for daylighting the brook on the Mill Brook Drive end of the school property. (See Town Building Projects in mid-term priorities.)
7	Enhance visibility of and access to the brook in Mount Pleasant Cemetery.

 Develop educational materials and regular community-based programs at public sites along the corridor to create better awareness about the brook and its history.

Section	Actions
All	Create new historic and wayfinding signage and related educational programs that accentuate the cultural and natural history of the brook.
2	Work with the Old Schwamb Mill on educational programming and other public activities.

• Work closely with abutters of the brook and those within the broader corridor on environmental management and landscaping of streambanks.

Section	Actions
1	Work with the Arlington Housing Authority and other abutters on better walking linkages and repairs to the fence along the Drake Village border.
2 & 3	Work with landowners to identify new opportunities for improving the corridor.
4	Work with condominium and business owners on easements or other means to construct a walking path the full length of this section from Brattle to Grove streets.
6	Examine strategies for opening up the grounds behind Cusack Terrace with accessible walking paths into Cooke's Hollow.

### **Photo Sources**

Davis, George H. *Mill Brook*: ca. 1920-1930. Courtesy of Robbins Library, Arlington, MA. Digital Commonwealth: <a href="https://ark.digitalcommonwealth.org/ark:/50959/5999nh93b">https://ark.digitalcommonwealth.org/ark:/50959/5999nh93b</a>

LeRoyer, Ann. Arlington's Great Meadows: 2018. Used with permission of photographer.

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Southwick, Peter. Behind Mill Brook Square: 2018. Used with permission of photographer.

- ---- Cooke's Hollow: 2018. Used with permission of photographer.
- ---- Corner of Mill St. and Mill Brook Drive: 2018. Used with permission of photographer.
- ---- Mill Brook: 2018. Used with permission of photographer.
- ---- Mill Brook Drive: 2018. Used with permission of photographer.
- ---- Mill St. Dam Site: 2018. Used with permission of photographer.
- ---- Theo Schwamb Mill: 2018. Used with permission of photographer.

White, David. 2010 Flooding Colonial Village: 2010. Used with permission of photographer.

Workers at the Charles Schwamb Mill, 1873. Courtesy of the Schwamb Mill Preservation Trust.