

Arts & Innovation District

Urban Design Framework

Somerville Planning Board
Adoption August 6, 2026



Artistic rendering of the civic space between new buildings showing indoor/outdoor flow of activities

INTRODUCTION

An Urban Design Framework (UDF) is a planning document providing design principles that guide the physical redevelopment of an area of Somerville. Similar to an Area Plan, it functions at the conceptual and policy level to help translate the objectives of Somerville's comprehensive master plan, Somervision, to site-specific infill projects and thoroughfare improvements.

The key difference between an urban design framework and other planning documents is its focus on design rather than addressing a broader range of urban planning policy issues, zoning changes, and capital projects. With a focus on physical form, spatial structure, and design quality, UDFs provide a playbook to guide what a place should look and feel like, and how its parts fit together physically, spatially, and visually.

This document is used by design review commissions and special permit granting authorities to provide a documented basis for decisions regarding land use and development, ensuring these decisions align with the community's comprehensive plan and the public interest.

The Somerville Zoning Ordinance (SZO) mandates that the Planning Board adopt a UDF for each sub-area of the Master Planned Development (MPD) overlay district that is not subject to an officially adopted area plan.

This UDF addresses design elements for:

- Public Realm
- Streetscapes
- Civic Spaces
- Buildings

CONTEXT

The Arts & Innovation (A&I) subarea of the MPD zoning district aims to redevelop the former industrial complex with mixed commercial development. This dense development will also support the arts & creative economy by producing new space for the creation, display, exhibition, and production of the arts.

This area has historically been industrial, with the area's first industries including grist mills, sawmills, stone quarrying, and shipping-related businesses. American Tube Works – the first company in the U.S. manufacturing seamless brass tubes for engines - existed in the area from 1851 to 1935. In 1919, a new chapter began with the Ames Safety Envelope Company manufacturing safety mailing envelopes and file folders. The company closed in 2010.

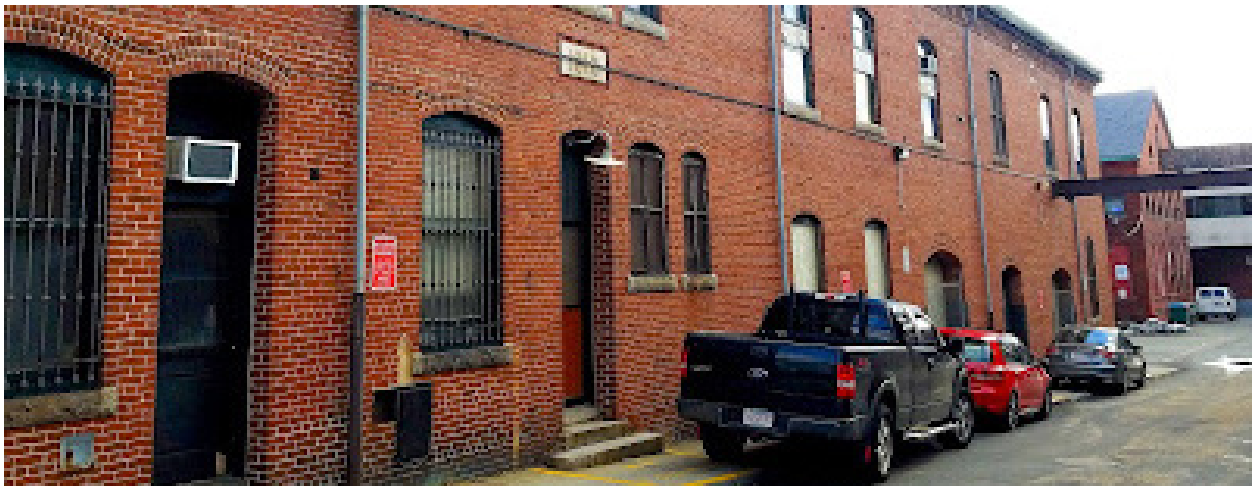
This area's industry has transitioned from metal tube and envelopes to climate research, green technologies, and advanced manufacturing, yet it remains a key employment center for the City. This district continues to be an important part of the city's economic engine as a hub for advanced manufacturing and technology companies. It supports the growth of the climate tech-oriented research and development cluster and expand facilities in proximity to existing technology incubators such as Greentown Labs. This district provides viable space for existing companies to grow and provides opportunities for research and development headquarters to be established or attracted to Somerville.



Existing buildings with the historic buildings highlighted in purple



Welding flanges on a steel pipe, circa 1897



One of the remaining American Tube Works buildings, abutting the A&I district, which currently houses arts uses

VISION & OBJECTIVES

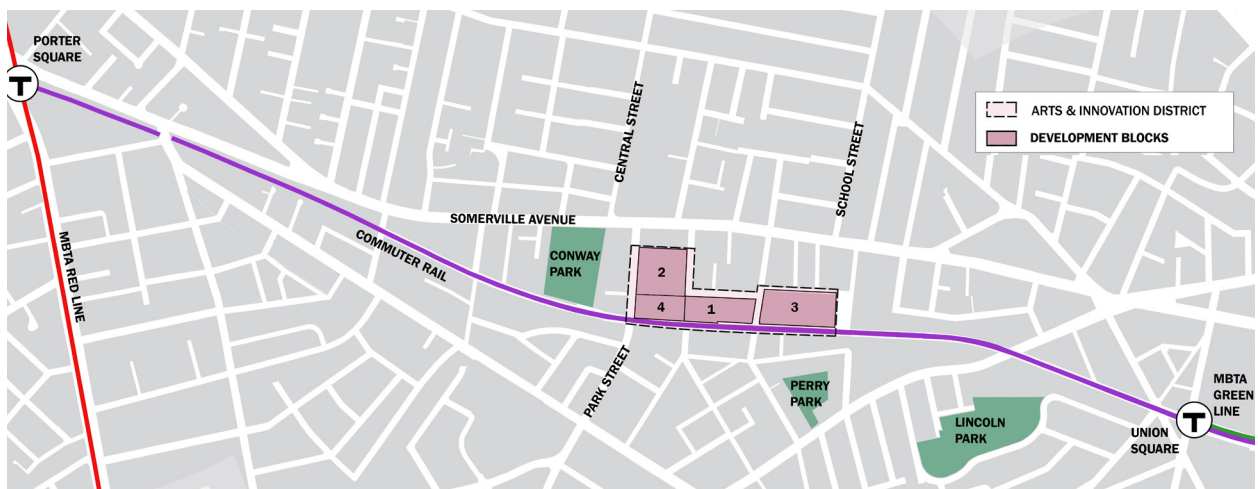
A district is a mixed-use area with a more specialized concentration of uses than the broader mix of activities typically found in a complete neighborhood. The A&I District builds on the area's industrial heritage to create a unique destination that celebrates its history while strengthening the local economy. Unlike a campus, which is often inward-facing and less public, the district is envisioned as an integral part of the city's urban fabric, connected to surrounding neighborhoods and contributing to the city's broader mix of uses and activities.

As the A&I District evolves, it should respect the surrounding residential neighborhoods by minimizing potential impacts while enhancing the public realm. Although adjacent residential areas are not included within the district boundaries, nearby property owners and residents are encouraged to support the district's vision by incorporating public art, enhancing building facades and front yards, and expanding the neighborhood tree canopy through new plantings.

New development in the A&I District presents an opportunity to bring the streetscape in these blocks up to the standard of other redeveloped areas across the city. Prioritizing walkability, through efforts such as establishing a new urban street wall, widening pedestrian ways, and planting street trees, benefits current residents and future employees alike.

To emphasize that this district is part of a larger neighborhood within the city, streetscape details should be consistent with city-wide standards. This integrated concept should apply to all civic spaces too – plazas and green areas are fully open to the public, all ages and abilities. And while the district has a rich history, new architecture should be a blend of traditional building materials that integrate climate resilience features and new technologies without replicating the old.

While this UDF concentrates on physical design, there are three focus areas that should resonate throughout all decisions about the district: Arts, Innovation, and Climate.



Key map showing Arts & Innovation District location in relation to rail transit and major city parks

ARTS

Somerville has lost many arts destinations in recent decades, but the historic buildings in this area are still home to a number of artists and creative enterprises which must be supported and expanded.

The A&I district must be an area of co-creation, a partnership between arts and technology. It provides a unique and valuable opportunity to blend artist inspiration with technological innovation through programming and the built environment.

Creating an “Arts Scene”

Creating an arts scene involves much more than enabling development of new spaces or requiring specific uses. Public art of various sizes and mediums - murals, sculpture, interactive installations, etc. - must be included throughout the district. Business owners and tenants should be encouraged to create a robust program of activities and events building upon the loyal following of the existing DoJo and entertainment in the brewery courtyard.

This district will become the heart of a music ecosystem for the city, just as it is for the innovative companies of Greentown Labs. It will be a place for local musicians to create, rehearse, write, record, perform, and learn. The development must include diversely sized live music and performance venues, speakeasies, cafes, music/arts focused retail, affordable music recording and rehearsal space, and more. Setting the stage for a vibrant, dynamic urban place where civic spaces, architecture, programming, and community participation blend seamlessly to create an ever-evolving arts and music scene.

INNOVATION

Somerville is a regional leader in the Innovation Economy. The A&I district already serves as a hub for “tough tech” (applying science, engineering, and technology) and “climate tech” (supporting decarbonization, alternative energy, and emissions reduction). As these industries continue to evolve, the district should accommodate their changing needs, allowing existing companies to stay in Somerville as they grow.

However, Somerville has also been supportive to entrepreneurs and creative start-ups. This innovative spirit should be emphasized in this district by allowing a variety of smaller leasable spaces, with a variety of ceiling heights, and shared amenities to encourage new ideas, help young companies learn from the established businesses, and flourish.

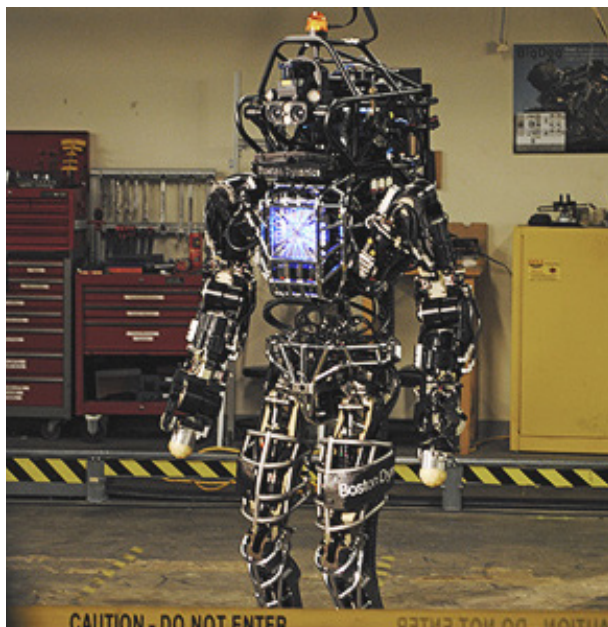


The Prince & Princess of Wales visiting Greentown Labs in 2022

Creating places for the Innovation Economy to thrive

The A&I district will require specialized commercial building types to accommodate hardware-focused research and development enterprises' unique needs. Unlike traditional office or biotechnology spaces, these buildings must support large-scale material processing, prototyping, testing, and assembly activities, which require larger floorplates and taller floor-to-floor heights.

While a lot of activity already happens in the existing DoJo and space in front of the brewery, the more places there are to interact, then more chances for collaboration and creativity can occur. Using innovation as a concept for art installations can create a draw to civic spaces, play a critical role in fostering creative collaboration, and provide education opportunities for future innovators.



Atlas, MIT's prototype emergency response robot

CLIMATE

Climate Forward (<https://www.somervillema.gov/departments/programs/climate-forward>) is Somerville's plan to create a strong, healthy community in the face of climate change, while simultaneously reducing pollution and our dependence on fossil fuels. The A&I district must exemplify the technologies and products to improve the climate and sustainability being incubated and invented in the area.

Demonstrating advanced climate solutions

The urban design must incorporate the best practices for stormwater management, and the district must discourage driving in order to help eliminate transportation-sector emissions and outwardly demonstrate cutting-edge building materials and maintenance technologies. Development must implement low- and non-carbon energy systems (e.g. networked geothermal), achieve Net Zero operations by 2040, and target aggressive embodied carbon reduction targets 40% below the industry baseline for all new construction.

PUBLIC REALM

The public realm should embrace the concept of streets as shared space that blurs the distinction between pedestrian and vehicular areas, promoting mutual respect and shared responsibility, and allowing the entire district to be a canvas. This requires slower vehicle speeds and reduced vehicular signage, and the removal of physical barriers between vehicles and people, such as curbs on Tyler and Properzi Streets, to foster a more harmonious coexistence between all users.

Pedestrian Priority

A place designed for walking requires ample, attractive sidewalks, active ground floors, and a network of pathway options. The public realm should also include comfortable places to wait for transit, ride-shares, or shuttles with shade from trees and protection from inclement weather, as well as good lighting and signage.



Wide sidewalk with stormwater plantings and cafe seating



Pedestrian priority and bicycle focus

Bicycle Focus

Development must be consistent with *Bike Somerville the City of Somerville's Bicycle Network Plan* (<https://www.somervillema.gov/content/somerville-bicycle-network-plan>). The City is scheduled to complete separated bicycle facilities on Somerville Avenue in 2027. Park Street is designated for two directions of separated bike facilities; Dane Street is designated for one direction, and Tyler/Properzi will be low-traffic, low-stress “Neighborway” streets.

Vehicle Routing

Curb cuts will be restricted on streets internal to the district such as Properzi Way, Tyler Street, or Frost “Music” Alley.

Passenger and service vehicle access must be provided from new alleys, or via dedicated service driveways where possible along the railroad tracks. Where rear alley access is not possible, then all vehicle access must be from Park and Dane Streets.



The shade structure in Morse-Kelley Playground

Transit Emphasis

By 2030, the MBTA will have established a new High Frequency Route 96 bus service on Somerville Avenue connecting Union, Porter, and Davis Squares along Somerville Avenue with 10-minute headways. The City of Somerville must do its part to ensure that these frequent buses are not stuck in traffic by constructing in-lane bus stops and adding transit signal priority at signalized intersections. The City must enhance rider comfort by installing weather shelters and real-time arrival signage at bus stops.

Heat Mitigation

The A&I district needs a coordinated approach with co-operation from the city, residents, and development teams to deal with urban heat islands and rising temperatures. This strategy should focus on managing hotter summer weather and creating more comfortable microclimates.

Stormwater Management

The A&I district must address substantial infrastructure challenges as the City's systems are already stressed and experiencing flooding during storm events, which climate change will further exacerbate. New development must include a robust stormwater management system as part of the citywide improvements to reduce the volume and peak runoff rate of stormwater discharging during storm events.

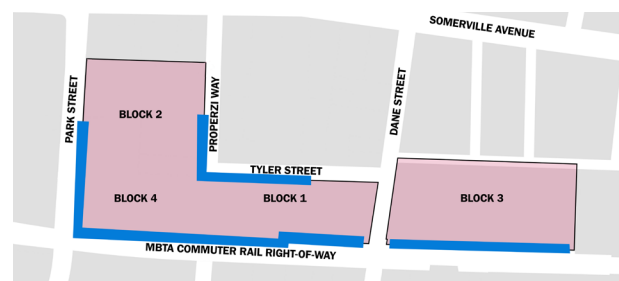
Flood Protection

New development must be flood-resistant, particularly in areas identified as susceptible to flooding as shown on the diagram below.

Requirements include:

- Raised elevations based on flood projections for protection of critical infrastructure and equipment.
- Separation of the combined sewer in Park Street and Properzi Way.
- Implementation of green infrastructure, bioswales and rain gardens to manage stormwater where appropriate.
- Integration of permeable paving materials.
- Design strategies that accommodate periodic flooding.

By using a mix of natural features, such as intentional landscaping and increasing tree canopy, and building designs with limited impermeable surfaces and light colored or reflective roofing, the area can stay cooler and be more comfortable for people to enjoy the area.



Areas of buildings requiring increased flood resistance

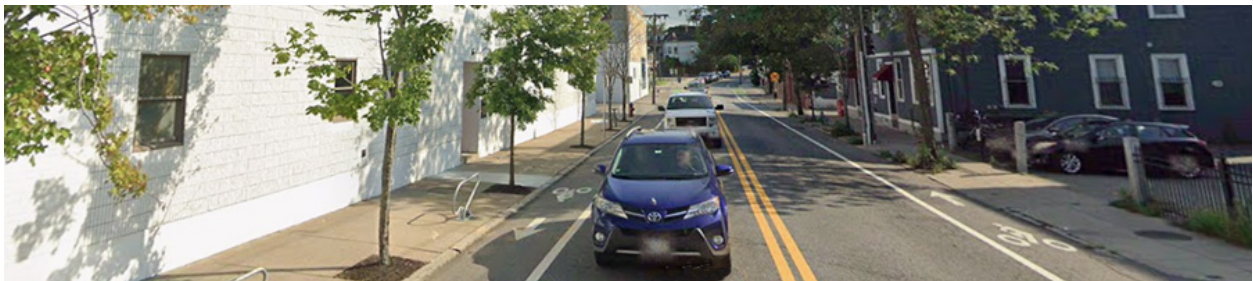
STREETSCAPES

Streetscape is part of the public realm and refers specifically to the visual and functional design of the streets - the vehicle travelway, sidewalks, street furniture, lighting, and trees. Streetscapes in the A&I district, at a minimum, must emphasize walking and biking, and, therefore, must include comfortable and accessible sidewalks and bike facilities.

The upgrades to streets will follow the ***Bike Somerville City of Somerville Bicycle Network Plan*** (<https://www.somervillema.gov/content/somerville-bicycle-network-plan>) and the ***NACTO Urban Street Design Guide*** (<https://nacto.org/publication/urban-street-design-guide/streets/>). The city departments that oversee mobility, utilities, and streetscape will consider the city-wide perspective regarding circulation, stormwater, and

the quality of design throughout the reconstruction process. Repairing the existing public rights-of-way will require complex coordination between multiple parties to ensure that all the below grade and surface improvements meet or exceed City standards.

As sustainability should be evident throughout the district, the streetscapes must prioritize increasing the tree canopy to provide shade and improve air quality as well as reducing the urban heat island effect created by paving and buildings. Incorporating sustainable design elements via functional landscaping such as permeable paving, bioswales, and reflective materials should be used to further mitigate heat and improve stormwater management.



Existing view, looking south, of Park Street's limited sidewalk width and small tree pits

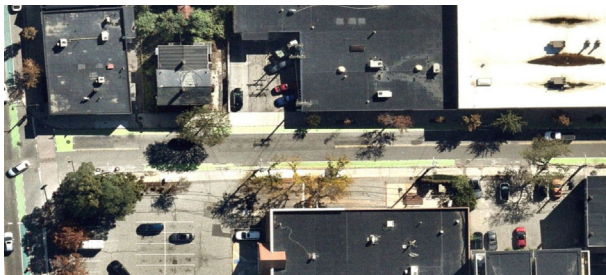


Possible expanded street section showing protected bicycle facilities, rain gardens, and an arcaded pedestrian walkway.

PARK STREET IMPROVEMENTS

Park Street is one of the few at-grade connections over the Commuter Rail tracks into Somerville and is an essential bicyclist thoroughfare. Park Street currently has unprotected bike lanes on either side but could be improved with rain gardens of native pollinators and space for new street trees to increase climate resiliency. Due to limited right-of-way width, per the SZO, a portion or all of the public sidewalk may be permitted under an arcade on the southeast side of the street. Active and attractive ground floor uses will front this arcade, such as arts and retail uses, prioritizing the pedestrian experience and provide climate protection.

Park Street will need to handle all vehicular access necessary for the new buildings on Blocks 2 and 4. Ideally, an alley would be provided along the railroad tracks to provide parking and loading access to Block 4. A new pedestrian and bicycle through block connection will join Park Street to the intersection of Properzi Way and Tyler Street providing access to the Block 2 civic space.



Existing Park Street with challenging narrow right-of-way

Development Standards

Park Street must:

- Be redesigned and reconstructed to provide two directions of separated bicycle facilities.
- Handle all vehicle traffic to Block 4, and possibly Block 2.
- Minimize curb cuts and use new alleys to access loading and parking.
- Accomodate public sidewalks via building setbacks or arcades.
- Address potential visibility issues at intersections with streets or sidewalks by raising intersections to sidewalk grade, adding rumble strips, and providing warning signs.

Design Guidelines

Development proposals should demonstrate:

- Identification of all driveway access on a master plan submittal.
- Design minimizing vehicle conflict with pedestrians and cyclists.
- Safe nighttime navigation with pedestrian-scale lighting fixtures that minimize light pollution.
- The use of landscape planting in rain gardens with native plants and pollinator habitat species.
- An increase in the number of street trees and canopy coverage.

NEW ALLEY ACCESS

The platting and design of thoroughfares included in any master plan must be consistent with the **City of Somerville Safe Streets Ordinance** (<https://online.encodeplus.com/regs/somerville-ma>, Code of Ordinances Part II Chapter 12 Article VII), which prioritizes design considerations for pedestrians first, then transit, cyclists, and finally motorists. A new alley between Park Street and Properzi Way at the rear of the properties facing Somerville Avenue is required. The alley access will respect sidewalk continuity on the streets to not disrupt pedestrian accessibility.

Development Standards

The new alley must:

- Include a two-way vehicular connection between Properzi Way and Park Street.
- Provide access for below-grade parking and to remove loading functions from the streets.
- Provide access to the properties facing Somerville Avenue.
- Address potential visibility issues at intersections with streets or sidewalks by raising intersections to sidewalk grade, adding rumble strips, and providing warning signs.
- Prohibit parking in alleys to maintain the function as pedestrian and bicycle paths.

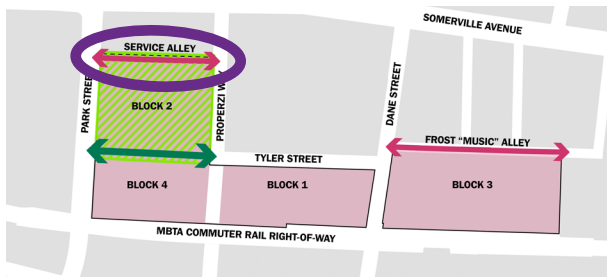
Design Guidelines

Development proposals should demonstrate:

- Service access balanced with potential pedestrian and bicycle circulation.
- Safe nighttime navigation with lighting fixtures that minimize light pollution.
- The use of low-impact pavement materials, such as pervious or modular paving.
- Green alleys that use sustainable materials and effective drainage to create opportunities for planting.



Example alley with plants in Detroit manages stormwater



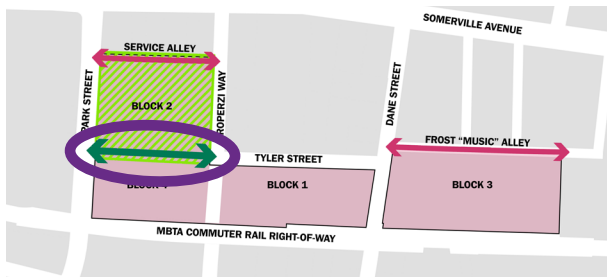
Location map

NEW THROUGH-BLOCK PLAZA

Parallel to the new alley access, a through-block pedestrian and bicycle connection must be provided for access through the district to adjacent civic spaces such as Conway Park and nearby amenities. This link must be located between Blocks 2 and 4, near the intersection of Properzi Way and Tyler Street, and connect to Park Street. The passage will be designed as a Through-Block Plaza civic space per the SZO and provide emergency vehicle access to the Block 2 civic space. The connection is critical to allow the larger community easier access to the Block 2 Civic Space to emphasize an engaging and walkable district while providing opportunities for sustainable landscaping and art installations.



Example of a Through-Block Plaza from Bethesda MD



Location map

Development Standards

The new Through-Block Plaza must:

- Provide pedestrian and bicycle access to Blocks 2 and 4.
- Be located immediately adjacent to the new civic space on Block 2.
- Allow emergency vehicle access to the Block 2 civic space.
- Address potential visibility issues at intersections with streets or sidewalks by raising intersections to sidewalk grade, adding rumble strips, and providing warning signs.

Design Guidelines

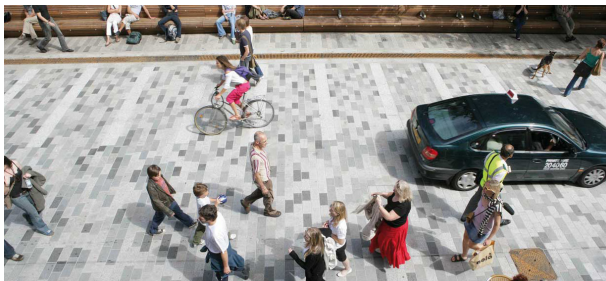
Development proposals should demonstrate:

- The use of low-impact pavement materials, such as pervious or modular paving.
- Design features and material selections that tie to the design of the civic space on Block 2.
- Safe nighttime navigation with pedestrian-scale lighting fixtures that minimize light pollution.
- The use of landscape planting in rain gardens with native plants and pollinator habitat species.
- An increase in the number of street trees and canopy coverage.

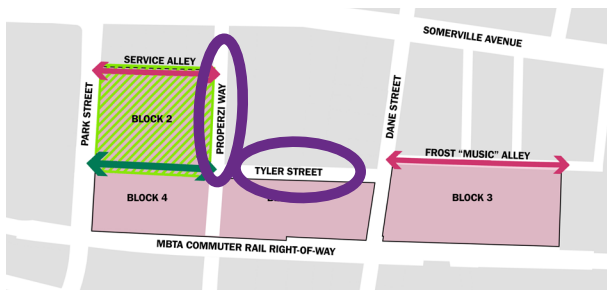
REBUILT TYLER STREET & PROPERZI WAY

The existing Tyler Street and Properzi Way will be redesigned and rebuilt as an integral part of the new development to provide new underground utilities and improved streetscapes for pedestrian safety. To address climate issues and pedestrian comfort, both streets will include new street trees and a design that encourages slow vehicle speeds in alignment with the City's walk- and bike-friendly Shared Street and Neighborway design standards.

Tyler Street and Properzi Way must not support truck traffic and loading areas will be accessed via the new alley access provided to Block 2. Clear speed limitations and directional signage will be necessary to minimize conflicts between passenger vehicles and pedestrians.



Travelway shared by multiple modes of movement



Location map

Development Standards

Tyler Street and Properzi Way must:

- Be designed as a Shared Street and/or Neighborway.
- Limit on-street parking.
- Restrict drop-off/pick-up to one side of the streets only.
- Address potential visibility issues at intersections with streets or sidewalks by raising intersections to sidewalk grade, adding rumble strips, and providing warning signs.

Design Guidelines

Development proposals should demonstrate:

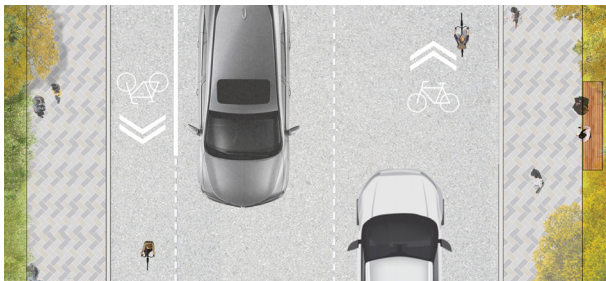
- An increase in the number of street trees and canopy coverage.
- Use of low-impact pavement materials, such as pervious or modular paving in the furnishing zone.
- Safe nighttime navigation with pedestrian-scale lighting fixtures that minimize light pollution.
- The use of landscape planting in rain gardens with native plants and pollinator habitat species.
- Ample opportunities for comfortable seating areas and public art installations.

DANE STREET UPGRADES

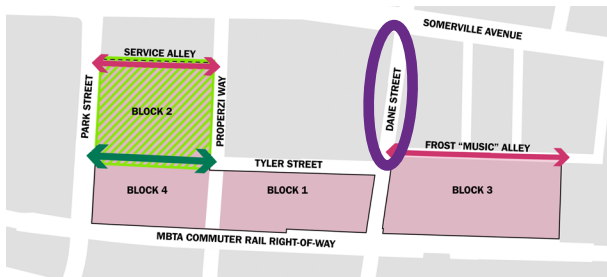
The intersection at the junction of Dane, Tyler, and Frost “Music” Alley will be raised and detailed as a gateway to the A&I district. Per the SZO, a portion or all of the public sidewalk may be permitted under an arcade but exterior sidewalks, where provided, must be planted and canopied to create a comfortable environment for walking around this critical area.

The existing bridge spanning the Commuter Rail tracks has a grade change creating an urban design challenge. The right-of-way width is only 43’ at the bridge, so a protected bicycle lane in only one direction of travel can be accommodated with a shared lane in the other direction.

While pedestrians have the highest priority, Dane Street will also need to handle the truck traffic necessary to service new buildings. Ideally, an alley would be provided along the railroad tracks to provide parking and loading access to Blocks 1 and 3.



Two-way street showing a dedicated bike lane in one direction



Location map

Development Standards

Dane Street must:

- Be redesigned and reconstructed to provide one direction of separated bicycle facility.
- Handle all vehicular access to Blocks 1 and 3.
- Minimize curb cuts with shared access to loading and parking.
- Address potential visibility issues at intersections with streets or sidewalks by raising intersections to sidewalk grade, adding rumble strips, and providing warning signs.
- Not provide on-street parking.

Design Guidelines

Development proposals should demonstrate:

- Identification of all driveway access on a master plan submittal.
- Design minimizing vehicle conflict with pedestrians and cyclists.
- Safe nighttime navigation with pedestrian-scale lighting fixtures that minimize light pollution.
- The use of landscape planting in rain gardens with native plants and pollinator habitat species.
- An increase in the number of street trees and canopy coverage.

MUSIC (FROST) ALLEY

The A&I district should protect and expand arts and creative businesses, with places that are designed specifically for their needs. The existing Frost Alley, between Dane Street and Market Basket, should be upgraded to become a flexible combination of thoroughfare and civic space - to become a place for indoor/outdoor interaction with the buildings of Block 3. The vision is to establish a place for local musicians to create, rehearse, write, record, perform, and learn with varied-size live music and performance venues, recording and rehearsal space, speakeasies, cafes, and music/arts-focused retail.

Music Alley will host events through car-free hours, enabling activities like markets and festivals to utilize the public realm. It must include furniture and landscaping that create comfortable and flexible shared spaces for pedestrians and cyclists while safely providing emergency access and extremely limited service truck access.

The specific site design of Block 3 should integrate a new service alley abutting the tracks. This addition to the vehicular network will divert trucks and vehicles away from Music Alley, further improving it as a public space for the neighborhood.

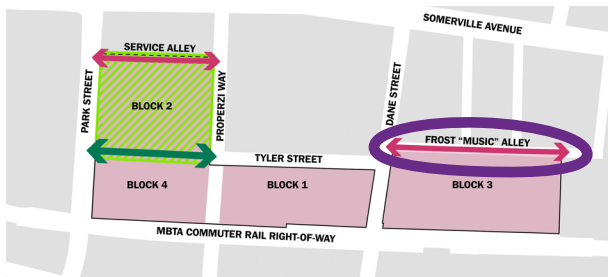
Development Standards

The new Music Alley must:

- Be supported by a service alley for Block 3 along the railroad tracks.
- Be detailed as Shared Street with no curbs separating vehicle and pedestrian zones.
- Demonstrate clear pedestrian-priority circulation.
- Support infrastructure for events and performances with seamless integration of outdoor and indoor spaces.

Development proposals for Block 3 must demonstrate:

- A service alley along the railroad tracks.
- A building setback, an arcade, or overhang along Music Alley that widens the thoroughfare for increased pedestrian space.
- A program of arts uses focused heavily on music rehearsing and performance.
- Inclusion of artist studios and creative incubator spaces.



Location map



Existing Frost Alley

Design Guidelines

The design for Music Alley should include:

- Identification of all driveway access on a master plan submittal and be designed to minimize conflict with pedestrians and cyclists.
- Increased street tree canopy.
- Safe nighttime navigation with pedestrian-scale lighting fixtures that minimize light pollution.
- Use of landscape planting in rain gardens with native plants and pollinator habitat species.
- Ample opportunities for comfortable seating areas and public art installations.



Example of a temporary outdoor music venue



Example recording studio and music lessons



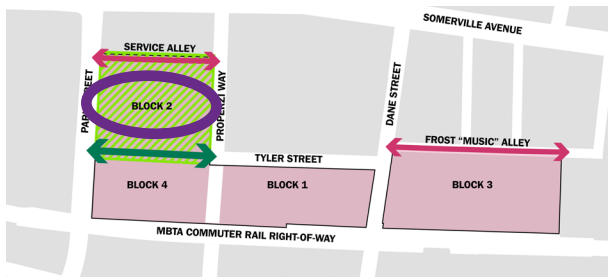
Artistic rendering of Music Alley

CIVIC SPACES

All shared and public spaces need to be designed with flexibility in mind to accommodate the changing needs of Somerville's population while adapting to climate change as well as the growing arts and innovation economies. Civic spaces need a sense of enclosure defined by the surrounding buildings, generous public seating and elements that create visual interest. The public spaces should be designed to foster social interaction, creativity, and engagement between the varied users.

A larger Civic Space is required on Block 2 connected to the new Through-Block pedestrian connection. This primary civic space must be designed using universal design principles so everyone can use the space comfortably and safely, no matter their age, ability, or background - easy to navigate for all people, including those with disabilities, parents with strollers, and older adults.

The space must include ample landscape plantings, that adhere to the **City of Somerville Native Planting Ordinance** (<https://online.encodeplus.com/regs/somerville-ma>, Code of Ordinances Part II Chapter 12 Article X) and designed with guidance from the **Somerville Pollinator Action Plan** (<https://voice.somervillema.gov/somerville-pollinator-action-plan>). It should incorporate a robust tree canopy, and plenty of places to rest or gather as a respite for the larger neighborhood to enjoy. Any design attempt at exclusivity, giving the impression of privatization or requiring a purchase to access, must be avoided. While a space may be owned and managed by a private entity, the space must remain public as described in the City's **Civic Space Design Guide to Privately Owned Public Space** (<https://voice.somervillema.gov/pops>).



Location map



Regulations and guiding documents for civic spaces

Development Standards

The new Civic Space must:

- Have a minimum size of 15,000 square feet.
- Be located adjacent to the new Through-Block Plaza.
- Be located and oriented to maximize sunlight hours.
- Provide tree canopy or shade structures over 30% of the area.
- Include functional landscaping that incorporates native plant species to provide pollinator habitats.
- Have adjacent buildings (Blocks 2 and 4) with ground floors that allow a flow of activity from indoor to outdoor and visual connections to active uses within.
- Include well-designed sloping walkways instead of ramps or only stairs, clear signs, smooth pathways, and seating areas that are easy to reach for all abilities.
- Identify a location for at least one significant art installation.



Example of an urban plaza with decorative paving, outdoor seating, and planting for shade

Design Guidelines

Development proposals should demonstrate:

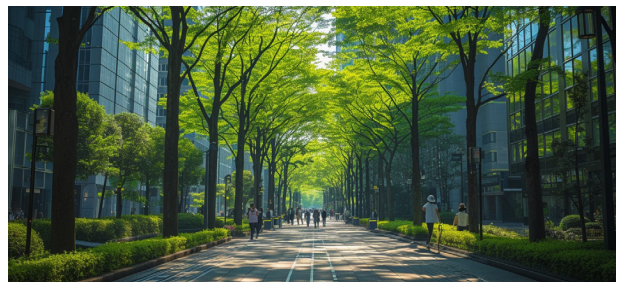
- Multiple options of places to rest or gather with a variety of seating options.
- Design for people of all abilities in both active and passive areas of the civic space.
- A flexible, multi-purpose design that allows for formal active programs and informal daily activities, such as pop-up events, to be a vibrant community hub.
- Landscape material and planting palettes designed with careful consideration of existing soil conditions and impacts of streetscape pollutants.
- Inclusion of native trees and flowering plantings to attract a host of insects in a biodiverse site that can also serve as a source of nourishment for birds.
- Improvements to the micro-climate to address heat island effects through the shade from a lush tree canopy.
- As appropriate for the soil conditions, incorporation of edible landscapes by considering food gardens, fruit trees, and greenhouses.
- Minimized paving that is permeable, to retain moisture, and requires limited maintenance.
- An interconnected network of shaded walkways through architectural features like arcades



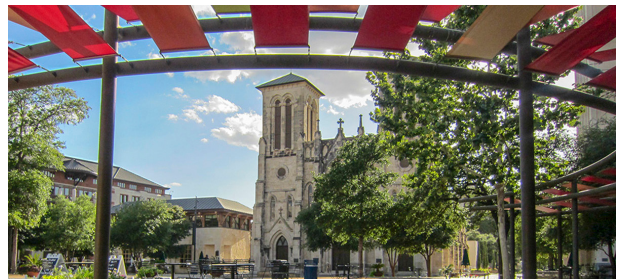
Fixed and movable seating in sun and shade



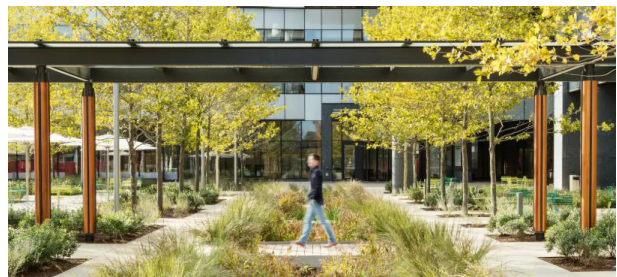
Plaza with permanent benches and generous plantings



A good example of urban tree canopy



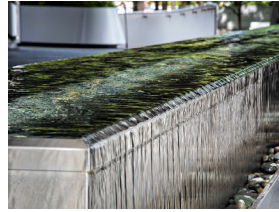
Shade structure example in a plaza



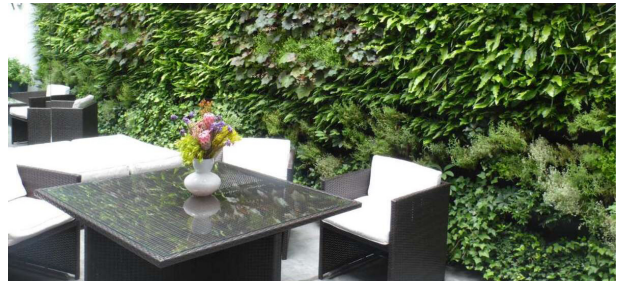
Interconnected walkways with a trellis amongst landscape

and overhangs, plus permanent and seasonal shade structures such as pergolas and trellises.

- Use of light-colored, or high-albedo, paving materials to minimize heat absorption and reduce the ambient temperature throughout the district.
- Green infrastructure tools and techniques such as green walls and green roofs on buildings and bioswales or rain gardens for stormwater management.
- Water features located to provide effective cooling and enhance the area's overall appeal by incorporating interactive fountains.
- Inclusion of public drinking fountains and bottle-filling stations throughout the district along with misting features in high-activity zones.
- A seamless connection between indoor spaces and outdoor areas to support community events, informal gatherings, and a wide range of activities.
- Adequate lighting to ensure that the space is safe and welcoming in the evening hours.
- Wayfinding signage, including educational signs, that adheres to City-approved design standards.
- Site furnishings that meet City-approved design standards and keep maintainability in mind.
- An emphasis on the creative arts by integrating artwork throughout the streetscapes and civic spaces.



Water features for cooling and drinking fountains



An example of a south-facing green wall



Adequate lighting to be safe and welcoming



Sculpture example - Plensa's *Mirror* at Rice University



Mural example - Fairey's *Obey* in Providence RI

BUILDINGS

Sustainable buildings are essential to embody the A&I district's core values by incorporating energy-efficient systems, renewable materials, and adaptive reuse strategies. These buildings reduce carbon emissions and operational costs, and sustainable construction signals a commitment to innovation. The district - where art, science, and sustainability intersect – should be a living laboratory for climate technology and urban resilience.

All new buildings must balance historic industrial character, taking architectural cues from traditional New England mill buildings, with modern sustainability standards and building technologies all the while supporting the functional needs of the innovation uses. Materials must be a mix of glass, steel, concrete, and masonry with authentic architectural expression such that even the utilitarian areas, like loading docks, can bring people together to foster interaction and collaboration. Open-air courtyards and rooftop gardens should be introduced to further demonstrate sustainability features

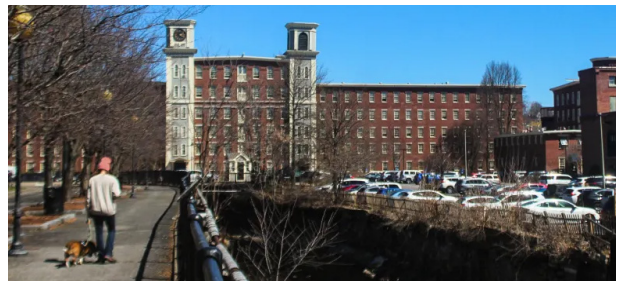
and provide opportunities for creative art installations.

These buildings will require careful architectural consideration in relation to:

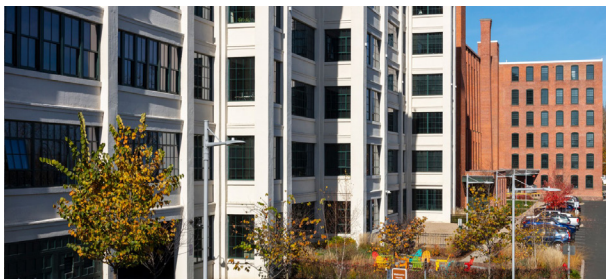
- Opportunities to create unique and inspiring building elements that enhance the sense of wonder in the public realm.
- Emphasis on human-scale design at the street and lower levels to articulate the potentially high floor-to-floor heights.
- Proportionally detailed façade treatments to maintain visual harmony with adjacent buildings.
- Incorporation of upper floor massing step-backs and vertical elements as wayfinding features.
- Incorporation of passive design strategies, such as solar orientation.
- Maximization of potential global warming savings by using low- or negative- carbon materials.
- Inclusion of district-wide systems, such as geothermal heating and on-site renewable energy.



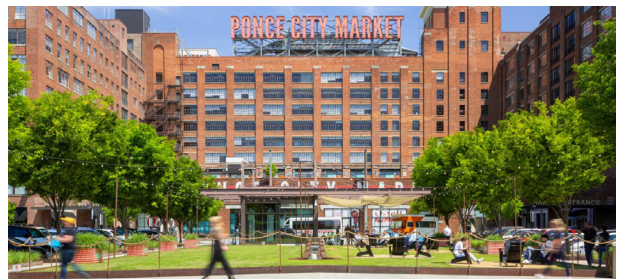
Brickbottom Artists Building, Somerville MA - live/work



Lowell National Historic Park, Lowell MA - mixed use



Montgomery Mill, Windsor CT - residential

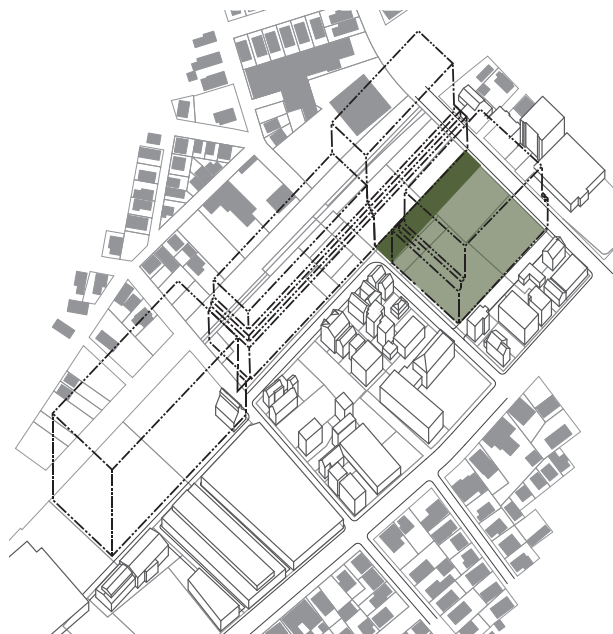


Ponce City Market, Atlanta GA - retail and offices

MASSING CONSIDERATIONS

Architectural proportions are about how the sizes of different parts of a building relate to each other and to the whole building. While it is anticipated that the program for the district will incorporate a range of R&D and arts uses, there is a need for high bay R&D spaces to accommodate innovative light manufacturing or prototyping. The increase in floor-to-floor height that is necessary requires special consideration of proportions and massing to ensure that the buildings are well-designed. High bay R&D spaces are characterized by:

- Flexible open-plan facilities with larger floorplates than standard commercial spaces.
- Floor to floor heights ranging from 15 to 25 feet to accommodate specialized equipment and warehousing stacking.
- Deeper structures for high floor loads and larger cores with oversized freight elevators.



Rendering of maximum massing per zoning

Development Standards

Development proposals must:

- Be NetZero.
- Emphasize human-scale design at the street and lower levels to articulate the potentially high floor-to-floor heights.
- Articulate horizontal cornices at different heights on different buildings.
- Address the skyline and mechanical penthouses as integral to the architectural design.
- Visually reduce the length of lower floors on large footprints along pedestrian ways by incorporating recesses or projections to appear as smaller buildings.

Design Guidelines

Development proposals should demonstrate:

- Visual interest throughout the district in overall composition by varying building and floor-to-floor heights of individual buildings.
- Variation in massing and façade treatments that reflect internal program.
- Ample operable fenestration at the ground floor to foster indoor/outdoor interaction.

TERRACED STEPBACKS

In architectural design, a building step-back refers to a reduction in a building's profile, requiring any section above a certain height to be pushed back toward the center of the property. This “wedding cake” effect helps ensure light reaches the street and lower building levels while creating a more open and welcoming urban environment. Additionally, these step-backs provide external terraces on the upper floors, which can serve as amenity spaces for building users, allow for green roofs, or support equipment.



Schematic rendering of terraced massing on Block 3



Example of articulated massing with multiple terraces

Development Standards

Development proposals must:

- Integrate stepped massing principles in the architectural design at the lower of the 4th story or 75’.
- Match unique architectural elements, especially on the upper floors, to the overall architectural style of the building.

Design Guidelines

Development proposals should demonstrate:

- Architectural datum lines reflective of elements of the surrounding buildings.
- Varied heights and visual architectural interest.



Example of single stepback at 7th floor

FAÇADE DESIGN

A façade is an exterior wall or face of a building that is oriented to a street or a civic space. Traditional building façades often showcase architectural styles and materials that reflect the cultural and historical context of a region. The buildings will be modern in the technology of the materials and must use the latest best practices for sustainable architecture, however common features should include brickwork, stone cladding, ornate detailing, and symmetrical designs to maintain the industrial character of the area.

Development Standards

Development proposals must:

- Adaptively reuse old industrial buildings, specifically the historic American Tube Works buildings.
- Integrate new buildings with the urban context, referencing the historic industrial heritage and architectural styles.
- Limit glass curtainwall to no more than 50% of the wall surface area on upper stories.
- Have a tri-partite design with a clearly articulated base, middle, and top to the façade.
- Articulate building components seamlessly with the main massing and the architectural style.
- Use raw materials, such as unpainted brick, and expose structural elements like steel beams or concrete slabs with authentic installation and details.
- Use quality materials and details that will endure over time.

- Use vision glass at all ground floor fenestration.
- Include arcades on the ground floor to widen pedestrian zones along Tyler Street (Blocks 1, 2, and 4), Park Street (Blocks 2 and 4), and Music Alley (Block 3).

Design Guidelines

Development proposals should demonstrate:

- Heavy vertical piers of masonry or mass timber construction.
- Façade articulation responding to higher floor-to-floor heights, such that windows may need to be detailed as two floors with stacked fenestration.
- Punched windows gridded with mullions and metal or concrete spandrel panels.
- Minimal surface applied ornamentation but expression of construction methods such as exposed welds, bolts, or rivets.
- Variation in massing and façade treatments that reflect internal program.



Example of exposed materials and gridded windows

VIEW CORRIDORS

In urban design, “view corridors” refer to strategically defined travel routes that prioritize and protect views of significant landmarks, natural features, or other important elements from public spaces or specific vantage points. View corridors are a tool for creating a more visually appealing and memorable urban environment.

Art can provide a terminated vista as well as the architecture. Local programmers and digital artists could collaborate to create interactive art, tech-infused installations that seamlessly integrate with the buildings and physical spaces. For example, large digital screens built into walls could accentuate a civic space by showing generative art created by local artists, or augmented reality apps could allow visitors to experience hidden layers of art by using their smartphones, like seeing virtual graffiti on the walls that only exist through their lens.



Example of view corridors ending on architectural features

Development Standards

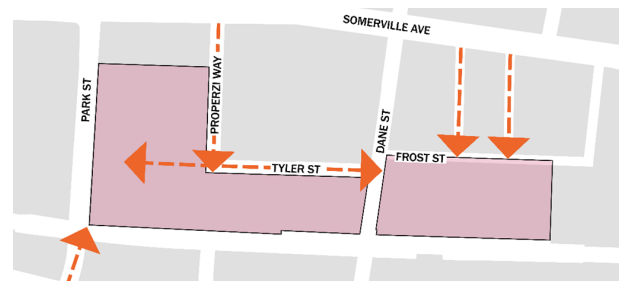
Development proposals must:

- Frame key views down streets as shown on the diagram below.
- Terminate views with unique architectural elements such as towers, entry features, significant civic art installations, or bridges.
- Include prominent entrances ensuring public access is welcoming, intuitive, and visible from key pedestrian routes and public spaces.

Design Guidelines

Development proposals should demonstrate:

- Building corners with architectural features to create landmarks as reference points describing the location.
- Elements of arts and innovation, such as dynamic sculptures or colorful murals, throughout the public realm.



Location map of potential terminated view corridors

GROUND LEVEL TRANSPARENCY

A well-designed ground floor façade can transform the frontage at the sidewalk into a place where people feel compelled to stop and look inside. A traditional “storefront” is composed of distinctive, well-established elements – most notably a stallriser (base or curb), large transparent windows, a fascia panel (top), and sometimes pilasters (to either side) – which together provide the basic frame. The details of the storefront should blend with the architectural style of the building but, when properly articulated as an inset element, does not have to fully match. The internal use is not required to be retail (a store) but should include visually active and physically interactive uses.



Example of operable transparent windows and doors

Development Standards

Development proposals must:

- Design storefronts as complete elements subordinate to the primary building structure.
- Include large operable transparent windows for internal/external visual and physical connections.
- Have readily identifiable and accessible entrances.
- Program active ground floor uses, especially abutting civic spaces and heavily travelled pedestrian routes.

Design Guidelines

Development proposals should demonstrate:

- Seamless connections to public space – streets and civic spaces.
- Incorporation of operable window walls, such as glass-paneled garage doors or foldable patio doors.
- Commercial-style porches.
- Setbacks (recesses) and projections (bay windows) to create human-scaled streets.
- Arcades and overhangs that are large enough to allow flexible use of outdoor space adjacent to the storefront.
- Careful acoustic screening at operable fenestration between commercial uses and residential abutters.

ADAPTIVE RE-USE

Adaptive re-use renovates and repurposes existing buildings for new uses with contemporary systems while preserving community history and historic character.

Part of the historic American Tube Works campus is outside the A&I district but many of the buildings are immediate abutters to the future development. The buildings at 438, 440, 444, and 460 Somerville Avenue should be carefully considered and addressed as important parts of the public realm and urban design of the larger area.

While these structures are not currently designated as historic it is preferable to preserve and re-use existing structures as this minimizes construction waste and embodied carbon. Reuse of these buildings also allows benefits from regulated indoor temperatures due to the high thermal mass in the existing load bearing masonry construction. These buildings have an aesthetic appeal with exposed detailing, high ceilings, and oversized windows for a unique character in many sought-after mixed-use environments.

24 Dane Street

The 24 Dane Street building is the only part of the historic American Tube Works that is within the A&I district. It should serve as a signature building within the redevelopment, acting as a visual and cultural anchor that celebrates Somerville's history of innovation and industry.

The 24 Dane Street building should:

- Be repurposed with community-focused uses.
- Maintain its role as a key visual landmark terminating Tyler Street.
- Explore indoor and outdoor activation opportunities.
- Preserve architectural form, features, and masonry details.



Adaptive re-use with an addition/expansion for a 2nd story



Existing adaptive re-use of an American Tube Works building



24 Dane Street existing building



Artistic rendering of 24 Dane as a potential community space



Somerville Planning Division
93 Highland Avenue, Somerville, MA