

**BOROUGH OF EAST GREENVILLE
COUNTY OF MONTGOMERY**

RESOLUTION 2023-12

A RESOLUTION OF THE BOROUGH OF EAST GREENVILLE, MONTGOMERY COUNTY, PENNSYLVANIA ADOPTING MAIN STREET DESIGN GUIDELINES FOR THE BOROUGH OF EAST GREENVILLE; REPEALING PRIOR INCONSISTENT RESOLUTIONS OR PARTS OF RESOLUTIONS; AND CONTAINING A SAVINGS CLAUSE AND AN EFFECTIVE DATE.

WHEREAS, the East Greenville Borough Planning Commission, in consult with the Montgomery County Planning Commission, has prepared and proposed to Borough Council a set of design guidelines for the Borough's Main Street corridor, titled "Main Street Design Guidelines"; and

WHEREAS, the Borough Council of the Borough of East Greenville thanks all involved in preparing the Main Street Design Guidelines, and believes it to be in the best interest of the Borough to adopt said guidelines as the official Main Street Design Guidelines of the Borough of East Greenville.

NOW THEREFORE, BE IT RESOLVED by the Borough Council of the Borough of East Greenville as follows:

Section 1. Adoption of Main Street Design Guidelines.

Borough Council hereby adopts the Main Street Design Guidelines, dated August 2023, attached hereto as exhibit "A" as the official Main Street Design Guidelines of the Borough of East Greenville. References to the "Main Street Design Guidelines" in other Borough ordinances, resolutions, and other official Borough documents, shall be deemed to refer to the Main Street Design Guidelines dated August 2023, attached hereto as exhibit "A".

Section 2. Repealer.

Any and all prior inconsistent Resolutions or parts of Resolutions are hereby repealed by adoption of this Resolution.

Section 3. Severability Clause.

If any portion, part or provision of this Resolution should be declared by a court of competent jurisdiction to be invalid, unconstitutional, illegal or unenforceable, the Borough Council of the Borough of East Greenville hereby declares its intent that this Resolution shall have been adopted without regard to such unconstitutional, illegal, invalid or unenforceable portion thereof.

Section 4. Effective Date.

This resolution shall become effective at the earliest time permitted by law.


ADOPTED and APPROVED, this 2nd day of October, 2023 in Council Chambers.

BOROUGH OF EAST GREENVILLE:



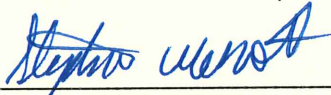
ANGIE FEGELY, COUNCIL PRESIDENT

ATTEST:



SHARON KACHMAR,
BOROUGH SECRETARY

Approved this 2nd day of October, 2023



STEPHEN WESCOTT, MAYOR

Main Street Design Guidelines



East Greenville Borough
August 2023

MONTGOMERY COUNTY, PENNSYLVANIA

2022-2023 BOROUGH OFFICIALS

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Stephen Wescott

Borough Council

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Main Street Design Guidelines

East Greenville Borough
August 2023



PREPARED BY MONTGOMERY COUNTY PLANNING COMMISSION

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The Vision for Main Street

Vision Statement, Revitalization Plan Update (2010)

East Greenville Borough will be a unique, destination driven, economic and cultural center for the Upper Perkiomen Valley by building off its distinctive community character and historic heritage. By valuing the Borough's location, history, vibrant Main Street corridor, and the family-oriented, small town lifestyle it offers to both its residents and business owners, a vital community with healthy neighborhoods and an attractive, pedestrian oriented downtown will be created...

Vision Statement, Main Street Design Guidelines (2023)

...Main Street in East Greenville will offer a safe, comfortable pedestrian-oriented experience for visitors of all abilities. The mixture of residential, commercial, cultural, and institutional uses will be enriched as lush street trees, decorative planters, and front yard landscape features will bridge the natural and built environment. The corridor's existing, historically-significant architecture will be retained and enhanced through adherence to a set of principles defined in the *Main Street Design Guidelines*, and through continued public and private investment. The uniform streetscape, intact historical architecture, and mix of compatible uses will attract new residents, businesses, and visitors to Main Street. Property and business owners will feel a sense of pride in the fact that they call Main Street 'home.'



Introduction

The Importance of Main Street

A street is the basic unit of space through which people experience a community. We often mistakenly think of the street as merely a two-dimensional surface that vehicles traverse. Streets are multidimensional spaces consisting of many surfaces and structures. They extend from one property line to another, including the building edges, land uses, and setbacks that define each side. They offer space for movement and access and facilitate a variety of uses and activities. Streets are dynamic spaces that adapt over time to support environmental sustainability, public health, economic activity, and cultural significance.

Streets are like outdoor rooms shaped by multiple planes: the ground plane at the bottom, the buildings and the roadbed edges as the side planes, and the canopy plane like the room's ceiling. Each plane is constructed of many elements that are often regulated or created by various policies, codes, guidelines, and building practices.

Understanding the various portions of a street as either continuous or interchangeable offers a flexible approach to street design. While clear sidewalk paths, bike lanes, and travel lanes must be continuous and connected to function effectively, interchangeable elements, such as parking spaces, trees, and green areas, allow a street to be adapted to serve its context.

Community Context

East Greenville Borough is located within the Upper Perkiomen Valley region of Montgomery County, Pennsylvania. The borough shares a border with Pennsburg Borough to the southeast and it is surrounded by Upper Hanover Township on all other sides. The borough has seen significant changes since its founding as a village in 1750: the 1874 expansion of the Perkiomen Railroad connected the community to the large markets of Allentown and Philadelphia, which spurred a shift to manufacturing and initiated a period of rapid economic growth. Homes built in this prosperous era persist to this day and the grand architecture stands as a testament to what the industrial heyday brought.

East Greenville is well connected to several of the major highways that traverse southeast Pennsylvania. Main Street, also known as PA Route 29 and, in locations outside the borough, Gravel Pike, runs across the Upper Perkiomen Valley and provides a direct connection through the six communities of the region. Route 29 continues southeast out of the

region all the way to Upper Providence Township where it meets U.S. Route 422, which in-turn provides connections to the Schuylkill Expressway (I-76) and Philadelphia to the southeast. Main Street also connects to PA Route 663 in Pennsburg, which runs north to Quakertown and the Northeast Extension (I-476) of the Pennsylvania Turnpike. Due to the limited options in the region, Quakertown fills much of the retail, service, and healthcare needs of residents of the borough and region.

Regional Setting

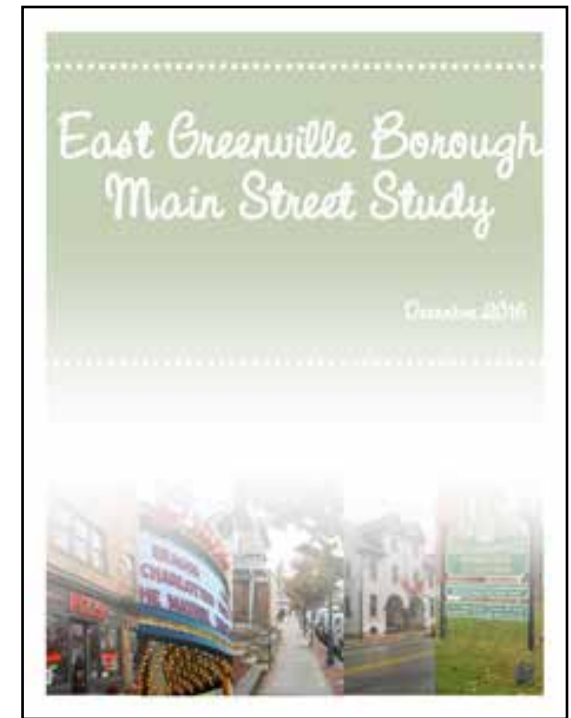


Community Development & Planning Efforts

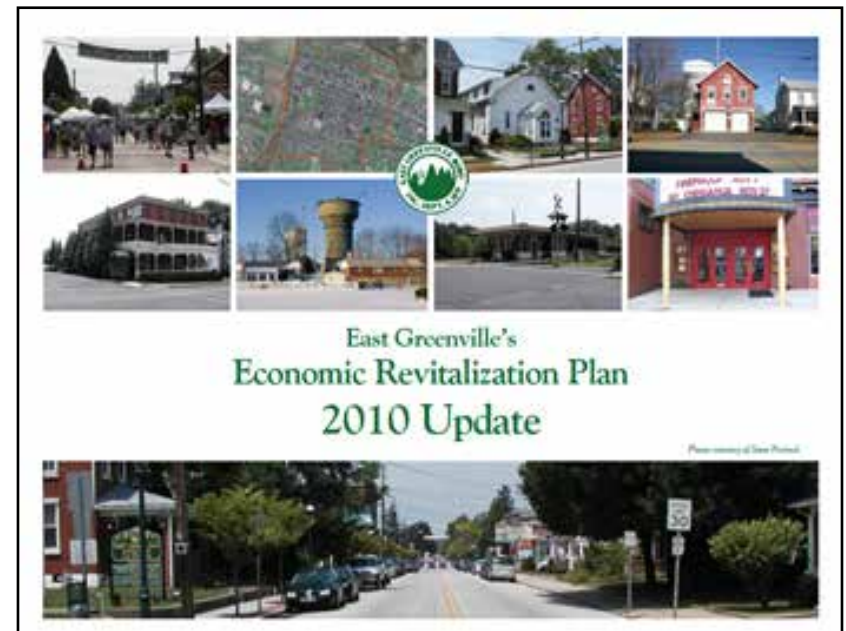
In addition to implementing the *Main Street Design Guidelines*, the borough is in the process of several other planning and community development projects. Borough Council has recently adopted a new subdivision and land development ordinance (SALDO) as well as comprehensive updates to the zoning ordinance. These updated ordinances will work in concert to encourage the appropriate mix of uses along the Main Street corridor and ensure that development is designed appropriately and in a context-sensitive way. The planning commission has also been working to identify and highlight historic resources throughout the borough.

The borough has been proactive in working to study and address perceived deficiencies in community and economic development throughout the last few decades. Throughout this time, the borough has undertaken several planning studies including the 2010 *Revitalization Plan Update*, the 2013 *Comprehensive Parking Improvement Study*, the 2016 *Main Street Study*, and the 2019 *Parks and Open Space Plan*. These plans hold a wealth of information and include comprehensive lists of goals, objectives, and recommendations that work towards meeting the borough's ultimate goal of revitalizing the borough and the Main Street corridor in particular. There are numerous aspects of these past studies that remain relevant today and which will be addressed, at least in part, through the *Main Street Design Guidelines* and which are summarized in Appendix B: Summary of Past Planning Objectives.

In addition to municipal planning efforts, the borough is a member of the Upper Perkiomen Valley Regional



Planning Commission (UPVRPC), which includes the Boroughs of Green Lane, Pennsburg, and Red Hill as well as Marlborough and Upper Hanover Townships. The six municipalities of the region cooperate through a regional planning commission, which meets monthly to review developments of regional significance and discuss long-range community planning objectives. The UPVRPC has been working with the Montgomery County Planning Commission (MCPC) to update the region's comprehensive plan.



Benefits of an Attractive Streetscape

Before discussing Main Street’s ideal streetscape, it is first important to understand what the term ‘streetscape’ includes. Streetscape is a term that is used to describe the natural and built fabric of the street, and defined as the design quality of the street and its visual effect. The concept recognizes that a street is a public place where people are able to engage in various activities. Simply put, the streetscape is what a pedestrian, bicyclist, or driver interacts with as they travel throughout the area. The streetscape in East Greenville includes sidewalks, decorative pavers, curb extensions, crosswalks, street trees, street lamps, seating, planters, and much more; but it also includes intangibles, such as the sense of nostalgia that one gets seeing the Grand Theater’s glowing marquee of coming attractions. A well-designed streetscape creates a “sense of place” that can be hard to put one’s finger on, but which one understands in one’s gut. In order to enhance East Greenville’s sense of place, the treatment of the Main Street streetscape has four overarching priorities, including:

Safety

Safety is the borough’s main goal and responsibility. Main Street is estimated to see between 10,000-11,000 vehicle trips daily, per the DVRPC Travel Monitoring Program, so it is of the utmost importance that vehicular traffic is considered in the context of pedestrian safety. The completed streetscape improvements work to calm traffic, namely via on-street parking and curb extensions, and make drivers aware of pedestrian crossings with

striped crosswalks and warning signage. Sidewalks and crosswalks must be designed and maintained with the safety of all users in mind.

Comfort

Comfort is a companion to safety, as one cannot feel comfortable unless one feels safe. The streetscape should offer ample tree canopy coverage to keep residents cool and comfortable. Benches or other seating areas should be offered throughout the corridor to allow users to take respite.

Wayfinding

The Main Street corridor must be easy to navigate if it is to remain a viable commercial and entertainment center. Luckily, the regional wayfinding signage has already been deployed throughout the borough and the region. These signs are of a design that is legible by passersby, and more signage can be added in the future as new attractions come to the area.

Aesthetics & Identity

Ultimately, the streetscape is the visual identity for the borough. When one thinks of East Greenville, they likely think of Main Street. The convergence of so many grand styles of architecture, ranging from Colonial Revival to Modern, combine to make a strikingly interesting experience for the viewer. It is a top priority for the borough to retain these important pieces of local history and to enhance the corridor through streetscaping.

STREETSCAPING ELEMENTS

Help to “furnish” a street with functional and aesthetic items that provide amenities and utility to pedestrians.

SIDEWALKS foster pedestrian-friendly street systems where pedestrians can experience safety, comfort, accessibility, and efficient mobility. 	CURB EXTENSIONS extend the sidewalk, provide an opportunity for social interaction, and offer a safe refuge for pedestrians crossing streets.
LANDSCAPED BUFFERS use trees and plantings to create a visual and noise buffer between pedestrians and vehicles. 	PLANTERS add color, texture, and interest to a streetscape.
SEATING provides places to rest, wait for transit, and socialize with others. 	PUBLIC ART enhances a sense of place, civic pride, and visual appeal to a public space.
LIGHTING increases a sense of pedestrian safety, security, and comfort. 	BIKE PARKING can be both functional and serve as public art.

Acknowledgements: Katherine Freitag, Marcia Scott, Sarah Pragg

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The Main Street Focus Area

Technical Description of Main Street

Main Street in East Greenville is roughly 7/10 of a mile running north-northwest between the municipal boundary with Pennsburg Borough to the south-southeast and Upper Hanover Township to the north-northwest. School Alley, south of Main Street, and Hickory Alley, north of Main Street, bound the core of the focus area; nearly all properties with primary frontages on Main Street also front on one of these alleys. Although not within the focus area, there are opportunities to enhance the connection between Main Street with the public parking lot and commercial area half a block north of Main Street at the intersection of Bank Street and 4th Street.

Main Street is approximately 36 feet wide, which accommodates two-way traffic and on-street parking on both sides of the roadway. It features sidewalks on both sides of the street between the border with Pennsburg and the intersection of 6th and Main Streets, near the boundary with Upper Hanover Township. Most blocks along Main Street have a uniform streetscape featuring a two-foot-wide band of brick pavers between the curb and the sidewalk, street trees, and ornamental street lamps. The south side of Main Street between 4th and 5th Streets and both sides of Main Street between 5th Street and the border with Upper Hanover Township lack these upgrades, and therefore limit the effectiveness of the streetscape as a “brand” for the borough.



Gateway signage greets visitors as they enter the borough

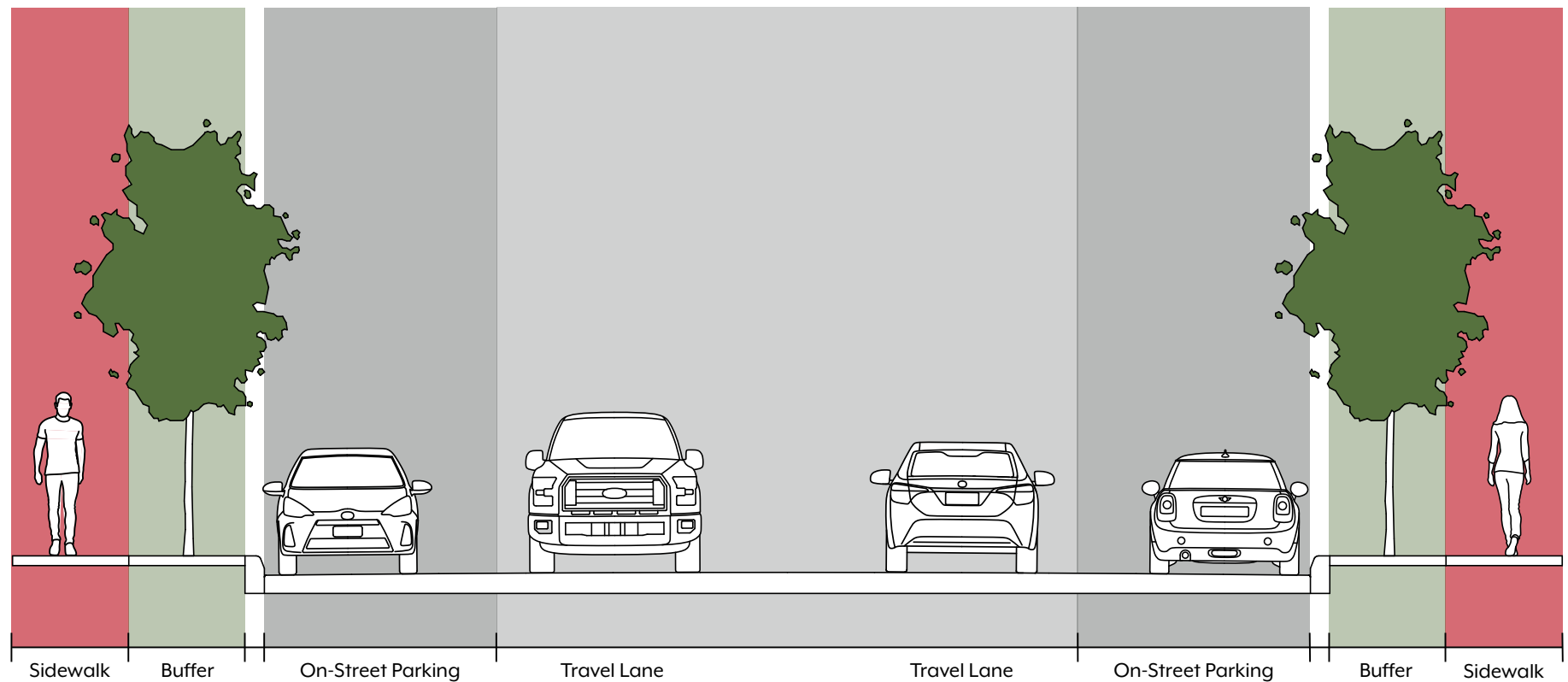
There are seven intersections along Main Street, of which three are four-way and four are three-way. The intersections of Main Street with 3rd Street and Bank Street each feature extended curb bump-outs. Land use within the focus area varies from residential to commercial, with many mixed-use buildings present. Land use within the focus area includes: 33

single-family detached homes, 75 attached homes, 18 multifamily buildings, 3 retail properties, 24 mixed use buildings, 6 institutional properties, one office building, one industrial building, and one undeveloped lot.

Buildings along Main Street are of various architectural styles but many prominently feature brick and stucco, which has created something of a regional

vernacular. With that said, Victorian (Queen Anne, mostly) and Colonial Revival are the most prevalent and easily recognizable architectural styles on Main Street. Although less common, there are also examples of Gothic Revival, Second Empire, Romanesque, Italianate, Beaux Arts, Bungalow Craftsman, and limited modern construction.

(Main Street) Arterial Road



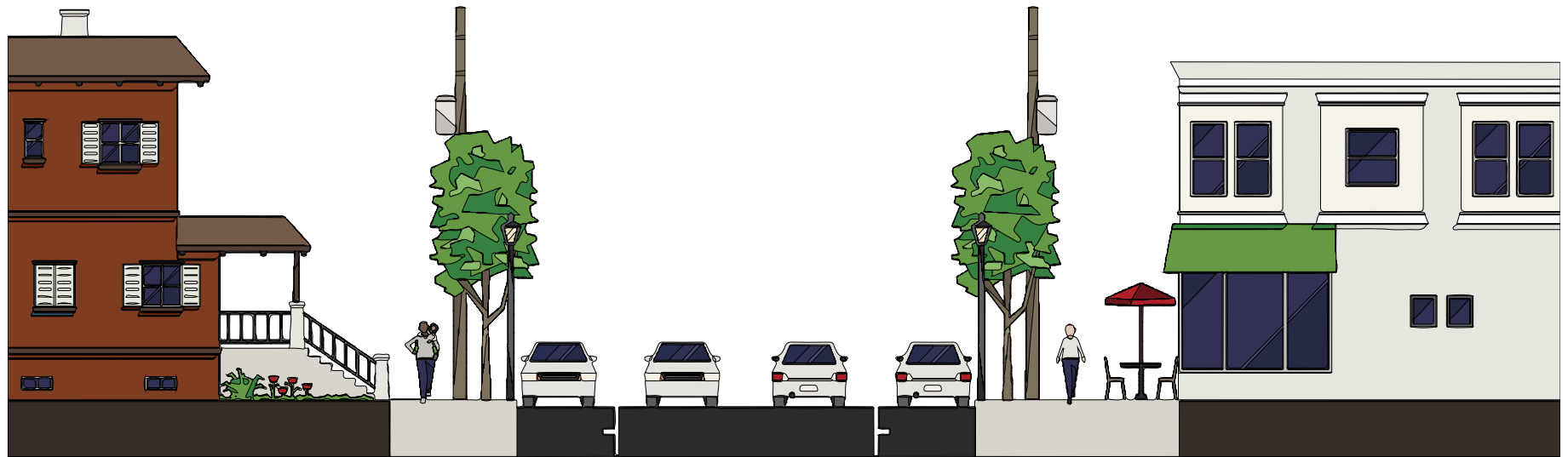
Anatomy of Main Street

The streetscape is a unifying and visually enhancing element of Main Street in East Greenville. Streetscape elements include all individual features from the curb to the building. These include the pieces that make up the transportation network for vehicles and pedestrians, street lighting, furnishings, café seating, benches, trash receptacles, street trees, planting borders, signage, public art, and other public safety or utility features (e.g., fire hydrants). These elements are in areas fronting on roadways and pedestrianways as part of the street scene. Each aspect of the streetscape has a place and a purpose.

Sidewalks and crosswalks constitute the designated pedestrian use zone where people of varying mobility should feel safe and welcome. The cartway and

on-street parking areas are essential aspects of the streetscape and provide an efficient vehicle use area. Street lighting, signalized intersections, and wayfinding signage helps to enhance the safety of the pedestrian and vehicle use areas, while contributing to the aesthetics of the streetscape and the experience of Main Street. A safe, accessible, and well-lit multimodal transportation network connects the community and demonstrates the borough's commitment to its resident's wellbeing.

Furnishings, located within the furnishing zone behind the sidewalk, provide amenities for pedestrians by adding functionality and vitality to the pedestrian realm. Furnishings provide streetscape continuity and may be adapted according to the character of



Demonstration of differing frontages occupied by residences (left) and commercial storefronts (right)



Example of the retaining walls, shallow front yards, and front porches that are ubiquitous on Main Street

each subarea, highlighting its unique qualities, provided they are cohesive throughout the corridor. Benches and seating areas improve the pedestrian experience and increase comfort by offering places to sit, rest, observe, and wait. Benches may encourage engagement and social interaction if adequately placed, particularly when co-located with other pedestrian amenities. Receptacles

for recycling, trash and other waste contribute to the streetscape's aesthetic, functionality, and environmental quality by limiting litter and promoting appropriate waste management, including waste diversion through recycling. Other features such as bike racks, water fountains, and public art, which are absent from the streetscape presently, may be introduced to further enhance the experience. Bicycle racks in particular are vital in promoting multi-modal transportation options and reduce streetscape clutter by providing the civic infrastructure required to park and secure bicycles and other micro-mobility vehicles (e.g., scooters). Streetscape elements such as these can contribute to the character of Main Street, support streetscape consistency, and provide many important functions.

Greenery is a hallmark of East Greenville and, fittingly, the borough's namesake. Street and yard trees not only add character, but they also provide numerous benefits

to pedestrians and property owners through the natural services provide (e.g., shade and stormwater management). The transition from the public to private realm and the interaction between the two is another key aspect of the streetscape, with front yard landscaping areas, fences, and walls acting as both a physical and symbolic separation between the public and private realms. These landscape areas are a key aspect of the sense of place and community.

Existing architecture is the pillar that defines the charm and character of Main Street, acting as a living reminder of East Greenville's legacy. New Construction that comes to Main Street will need to be considerate of the existing fabric and pattern of development. Any new additions to Main Street must be designed to complement the existing architecture rather than detract from it. Building facades set the outer limits of the streetscape and are an essential part of the Main Street experience.

Other pieces of infrastructure along the streetscape are not discussed in the guidelines, but these aspects are nonetheless fundamental pieces of the streetscape. Fire hydrants, utility poles, and street signs are ubiquitous on Main Street and provide for public needs. These features are necessary to the public safety and wellbeing, but they occupy much-needed space within the sidewalk. These aspects of the streetscape should contribute to the consistency of the streetscape and not impede the pedestrian pathway or overall experience for pedestrians.

In order to understand how a streetscape treatment may differ, three subareas have been identified based on the predominant uses and activities:



CENTRAL ZONE

The Central Zone represents the core of East Greenville. This area features a more distinct and eclectic set of uses, including residences, commercial and food service establishments, personal service shops, and an entertainment venue. Due to the wide range of activities within this zone, the pedestrian zone should include various pedestrian amenities, including seating, waste receptacles, planters, bike racks, public art, and water stations to facilitate interactions between people while encouraging movement and travel. The provision of seating is essential to reinforce the concept that the Central Zone is a destination where people should spend time and money.

SOUTH ZONE

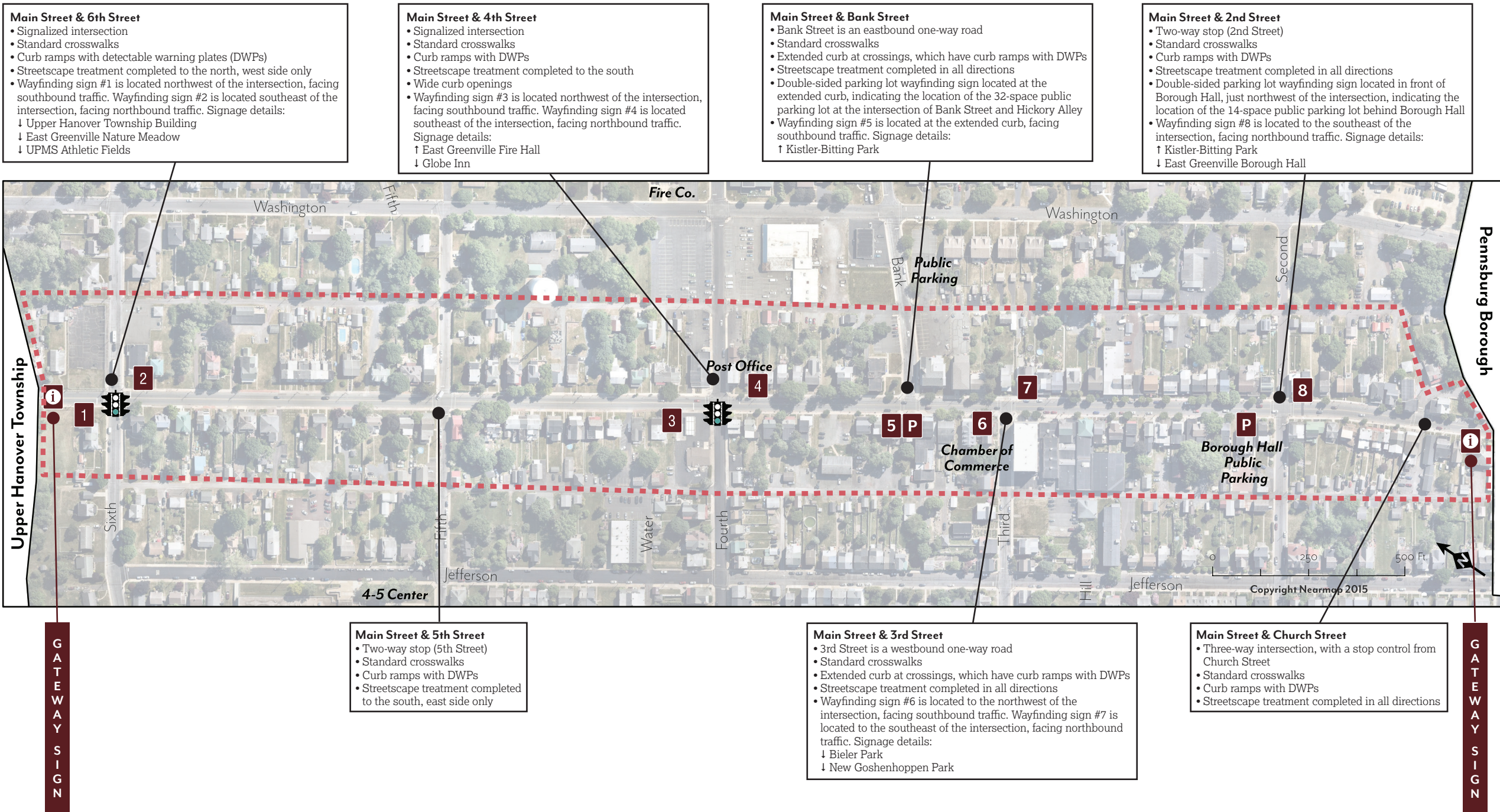
While primarily residential, the South Zone also features various uses, including institutional, commercial, and personal services. Because this area serves as an essential gateway to the Central Zone, efforts should focus on landscaping along the street and front yards and visually creating a cohesive streetscape. Signage for commercial uses should complement the landscaping and not be obtrusive. Amenity areas, which may include seating in specified key locations, can benefit residents in the immediate vicinity.

NORTH ZONE

The North Zone serves mainly as a residential corridor. Although some commercial uses exist, this subarea primarily features homes with relatively deep front yards. As with the South Zone, landscaping can help enhance and reinforce the character along this stretch of Main Street.

The central zone has a well-defined streetscape

EXISTING CONDITIONS IN THE MAIN STREET STUDY AREA



EXISTING CONDITIONS IN THE CORE SUBAREA



The Owl's Nest occupies the historic Keely House, originally built as a hotel around 1852.



A multi-tenant commercial building on Main Street.



The Chamber of Commerce is prominently located in the core of East Greenville. Pedestrian infrastructure is particularly strong in the central zone, due to the high amount of pedestrian traffic in the area.



Two of the most iconic buildings on Main Street: the Grand Theater and the former Knights of Pythias Hall



Borough Hall is located within a historic church; note the parking wayfinding sign

Challenges & Opportunities

Perhaps the greatest challenges for the Main Street streetscape are the physical constraints that limit the width of the sidewalk, both at present and in the future. There are numerous objects present within and adjacent to the sidewalk that inhibit pedestrian traffic, such as utility poles and street signs. Many building façades, architectural features, and front yard landscaping features are set up against the sidewalk and set the outer boundary of the public realm. The “street wall” created by numerous connected buildings of similar architectural styles creates a strong sense of place by creating a cohesive architectural rhythm, but it also limits the potential for expanding sidewalks. The presence of low walls and fences along Main Street is another defining feature of East Greenville’s identity, and these set a relatively soft barrier between the public and private realms. And, lastly, overgrown front yard landscaping has had the effect of narrowing the sidewalk in some locations; however, this is an easily rectifiable issue.

Turning inward towards Main Street itself, the most obvious challenge is the narrow width of the roadway. The roadway is just wide enough to accommodate two-way traffic and parking on both sides of the street. The narrow roadway eliminates the potential for sidewalk expansion, with the notable exception of curb bump outs at intersections; these have been shown to slow the speed of vehicles,



Public parking is available behind Borough Hall. The wayfinding sign facing Main Street relays this.

which improves pedestrian safety. With a posted speed limit of 30 MPH along Main Street, stopping distances are anticipated at about 75 feet or six car lengths; lowering the speed limit further could shrink stopping distances even lower. The narrow width of the roadway combined with curb bumpouts, parked vehicles, and warning signage can improve stopping distances as drivers are more cognizant of the potential for pedestrian crossings. With limiting features on both sides of the street, the potential for widening the sidewalk is limited.

Following a 2014 *Parking Improvement Study*, the borough took steps to address identified deficiencies in available parking for the Main Street commercial corridor. Today, the borough offers two public parking areas that are available for use by the general public.



Main Street has been closed for pedestrian-only events, such as community day

Borough Hall, at 206 Main Street, has a 14-space parking lot that is constructed of permeable pavers; the lot not only offers a place to park, but also stands as an example of best practices for parking lot design. The borough also offers a much larger public parking lot on Bank Street, which features 32 parking spaces. The location of both parking areas are indicated with the regional wayfinding signs on Main Street, and both feature large marker signs in the same style. The regional wayfinding signage acts as a unified marketing strategy throughout the Upper Perkiomen Valley. The wayfinding signs are positioned strategically throughout the region to help travelers to locate key locations and communities. The borough

also has well-marked on-street parking on both sides of Main Street in addition to private driveways, private parking lots, and street parking on side streets.

An unseen challenge impacting the community is the lack of staff time and resources to address Main Street's maintenance and improvement needs. The borough has a public works staff of two who are responsible for the infrastructure needs of all 0.51 square miles of the borough. With their many other duties and as emergencies arise, pruning and watering street trees may not always be on the top of the to-do list. It will be increasingly important to instill a sense of ownership of the sidewalk, street trees, and street furnishings in property owners on Main Street.

Lastly, there is the “elephant in the room” that is the lack of funding for Main Street improvements. As noted previously, a grant award made construction of the streetscape improvements along Main Street possible in the 2010s. Regrettably, due to high price tag and lack of subsequent grant funding, the remaining few blocks have remained incomplete ever since. Moreover, after so many years, some of the improved sections of the streetscape are now in need of repair. The brick pavers have become uneven in some locations due to years of wear, and this has been exacerbated by the heave of the metal and plastic tree grates. Now, the borough has begun the process of removing the metal tree grates and installing permeable tree surrounds (perkEpave) that are designed to do a better job of adapting to the growth of street trees and other natural conditions. Continued, targeted public and private injections of funding will be required in order to continue the necessary improvements and address ongoing maintenance concerns as they arise.



Main Street features well established street trees that provide shade, moderate temperatures, absorb stormwater, and are aesthetically pleasing.

Design Guidelines

How to Use the Guidelines

The design guidelines as a whole promote the vision for Main Street as a safe, comfortable and pedestrian-oriented experience for all residents and visitors to enjoy. The specific recommendations will help to encourage this aspiration through targeted improvements that will occur incrementally over time. Although the borough is committed to ongoing maintenance and intends to pursue funding opportunities for future capital improvements, many of the specific recommendations place the onus on the property owner.

The ensuing guidelines outlined in this document are primarily grounded in the requirements of the zoning ordinance and the subdivision and land development ordinance (SALDO); however, some recommendations are not specifically required by any ordinance. Applicable regulations will be cited throughout the course of the document, primarily in introductory sections and alongside design or product specifications, and these set the baseline for required improvements. The guidelines will take this minimum standard and offer examples of how this could be expanded upon to realize the vision for Main Street.

Main Street property owners are encouraged to approach the planning commission with questions about these guidelines before they submit for review and approval. This gives the prospective applicant a chance to address any questions or concerns with

COMPLIANCE REQUIRED!

Property owners, business owners, and developers must be aware of the regulatory requirements of the zoning ordinance, subdivision and land development ordinance, and other adopted ordinances in addition to the guidelines herein. Many topic areas include references to relevant regulations on both the introductory section and alongside design or product specifications; however, there may be other relevant regulations where compliance is required. The adopted Code of Ordinances is may be accessed on the Borough Website or directly at <https://ecode360.com/EA0573>

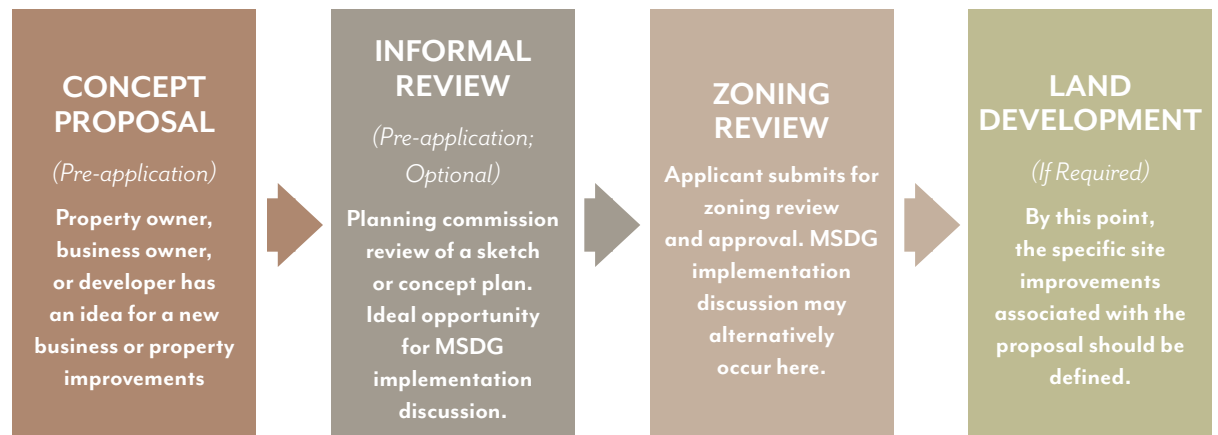
Consultation with utility companies and PennDOT may be necessary and should occur early in the review and permitting process.



the Planning Commission in an informal setting. For certain features, such as furnishings, specific examples and specifications are provided. Though the examples are the borough's preferred option, alternative products and treatments may be discussed with the Planning Commission on a case-by-case basis. This good faith effort benefits all parties and will encourage effective implementation of the guidelines.

Lastly, this document is not meant to replace the professional or technical expertise of design professionals such as engineers, architects, or landscape architects. In many cases, these qualified professionals will be necessary to help property owners select the proper material and installation method for a specific situation. The design guidelines provide a starting point for property owners to understand the goals that the borough has for the Main Street streetscape.

Planning Commission meetings are held monthly at Borough Hall and are open to the public. Check the Borough Website for the latest agenda.



Infrastructure

Sidewalks

The sidewalk is the foundation upon which other streetscape features are built, so the design of the sidewalk must be considered in the context of the overall streetscape. The sidewalk should be of uniform materials and design in order to create connectivity and clearly define “where” you are. The sidewalk must be wide enough to not only allow for two-way pedestrian traffic, but should also accommodate street furnishings and even outdoor café areas. A sidewalk can be beautiful as well as utilitarian and the guidance herein aims to demonstrate this premise.

Sidewalk Guidelines

The sections of the borough which have already received the streetscape treatment are a shining example of how the sidewalk can be designed to be both aesthetically pleasing and functional for users of different abilities: the sidewalk is generally quite wide, brick pavers are incorporated throughout the corridor, street trees and tree wells are provided yet they don't infringe on the pedestrian path, and other potential barriers are pushed to the curb so as to avoid narrowing the width of the sidewalk. In order to ensure that this streetscape treatment is expanded and enhanced, the borough codified the streetscape specifications for Main Street in the new (2022) SALDO.

Although it doesn't necessarily reflect existing conditions, the SALDO requires a minimum



Curb extensions and crosswalks at the intersection of Main Street and Bank Street

Relevant Regulations & Specifications

§ 85-57. Sidewalks

§ 85-58. Crosswalks, sets the required locations for crosswalks

§ 85-98. Concrete Sidewalk Improvements

Chapter 83, Streets and Sidewalks



ADA Minimum Standards

unobstructed sidewalk width of 10 feet for Main Street. The SALDO specifically indicates that the minimum width must be entirely free from obstructions, including street furnishings, which ensures that a minimum clear path of 5 feet will be provided on all new sidewalks throughout the borough. A width of 5 feet allows for two-way or side-by-side pedestrian traffic and creates ample separation between the roadway and private property, whether it be a storefront or a front yard. A width of 10 feet allows for higher volumes of pedestrian traffic and would allow for temporary furnishings within the sidewalk while ensuring that a five-foot wide clear path is provided. These minimum widths also ensure compliance with the Americans with Disabilities Act guidelines, which require a five-foot sidewalk and a four-foot accessible path.

In addition to defining the required width of the sidewalk, the SALDO also specifies that the sidewalk on Main Street must feature eight feet of traditional concrete surfacing and a two-foot wide band of brick pavers along the curb. The brick pavers augment the sidewalk with additional width, provide a smattering of color, provide visual separation between the cartway and pedestrian pathway, and tie-in with the building material that is so prominent in the borough's historic architecture. Paver samples should be reviewed prior to installation in order to ensure color, size, and texture match with the existing streetscape. It is important to note that the borough requires the use of individual bricks and does not allow stamped concrete.



This section of Main Street features brick pavers and a deeper sidewalk than average.

Curbing and Curb Extensions

Curbs may fulfill any or several of a number of functions. By delineating the edge of the pavement, they separate the road from the roadside and discourage drivers from parking or driving on sidewalks and lawns. They also provide structural support to the sidewalk and pavement edge. Curbs can also be used to channel runoff water from rain or melted snow and ice into storm drains. Curbing runs along the edge of public roadways and is interrupted by curb cuts for driveways and tapers to street-level at crosswalks

The design of the curbing itself does not permit much creative freedom, but it can and does improve pedestrian safety. Curbing can be employed as a way to improve pedestrian safety through curb extensions (also known as a bulb-out, bump-out, build-out, nib, elephant ear, curb bulge, curb bulb, or blister) which is a traffic calming measure which widens the sidewalk for a short distance. This reduces the crossing distance, slows traffic, and allows pedestrians and drivers to see each other when parked vehicles may otherwise block visibility.

Curbing and Curb Extension Guidelines

As noted above, the design of curbing is non-negotiable: the SALDO requires that curbing meet *PennDOT Specifications Publication 408* (current edition) which requires an 8-inch reveal (curb height above the roadway surface). Curbing should be concrete and match the existing curb, though granite curbing is permissible on private roads or parking areas.

Relevant Regulations & Specifications

§ 85-55. Driveway Intersections with Streets

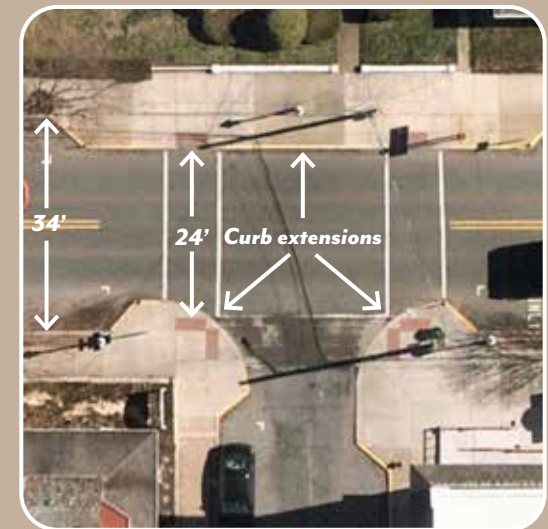
§ 85-57. Sidewalks

§ 85-58. Crosswalks

§ 85-93. Curb Construction

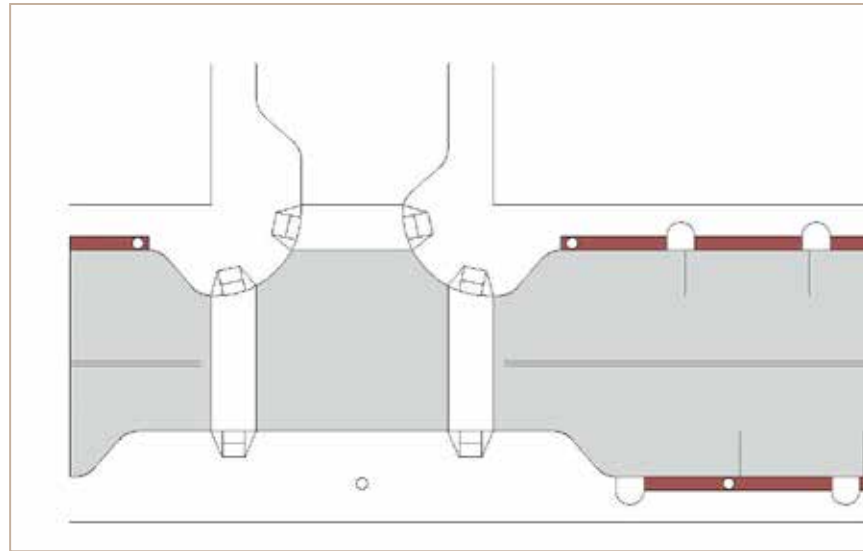
§ 85-97. Driveways

Chapter 83, Streets and Sidewalks



Alley access to properties fronting on Main Street is preferable, but there are about a dozen existing driveways present in the corridor and new driveways may be approved in the future. When driveways intersect the sidewalk they shouldn't feel like an interruption but rather a continuation of the sidewalk. A tapered driveway apron must be provided in order to comply with the SALDO and ADA guidelines, which require a longitudinal slope under 5.0% and a cross slope under 2%. Tactile plates (more on that in the **Pedestrian Crossings** section), paint, or decorative materials such as pavers may be utilized to alert pedestrians to the presence of a driveway.

Curb extensions are not required under any specific circumstances by the SALDO; however, § 85-58, Crosswalks, states that Borough Council may require the provision of curb extensions when determined to be necessary for pedestrian safety. There are already two intersections where curb extensions have been employed in the borough, and those are at the intersections of Main Street with Bank Street and with Third Street. It is no coincidence that both of these are "T" intersections with one side street connection from Main Street: pedestrian crossings at a "T" intersection may not always be as obvious to drivers. Curb extensions have the impact of drawing attention of the driver and of slowing the flow of traffic where the roadway narrows. The existing curb extensions reduce the crossing distance for pedestrians by about 10 feet or roughly 1/3. Curb extensions are most appropriate at intersections, though mid-block crossings may also warrant the provision of such. Corners of all intersections along the Main Street corridor and other high-traffic intersections would likely benefit from the addition of a curb extension.



Above: Graphic depiction of the curb bumpouts at Main & Bank Street

Below: Aerial image of the curb bumpouts at Main & Bank Street



Pedestrian Crossings

Main Street sees over 10,000 vehicles per day on average (DVPRC Travel Monitoring), and this high volume of traffic creates numerous opportunities for potential conflict with pedestrians. Well-marked and convenient pedestrian crossings are the best way to avoid conflict between the two: PennDOT boasts that high-visibility crosswalk enhancements can reduce pedestrian-involved crashes by 23-48%. Safety can be further enhanced with signage, the likes of which can be found throughout Main Street, and with pedestrian-controlled buttons where traffic lights are present. It is important to remember that Main Street is maintained by PennDOT, and therefore PennDOT must be consulted for any modifications along the corridor.

Pedestrian Crossing Guidelines

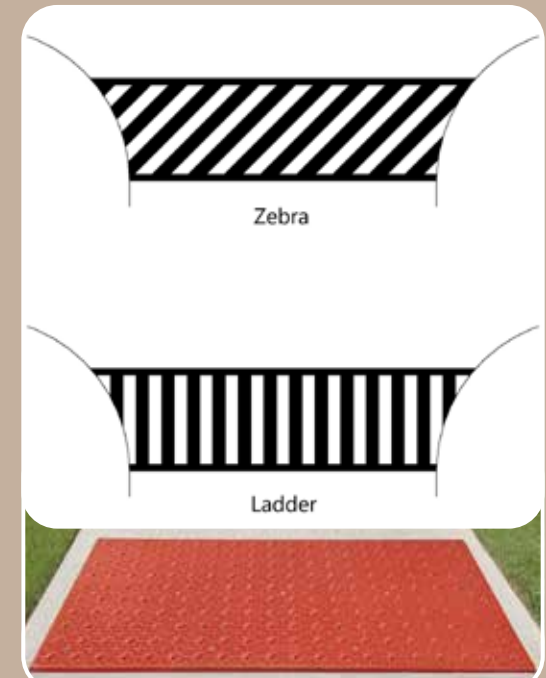
Crosswalks are provided at every intersection along the Main Street corridor, however high-visibility styles are recommended as restriping occurs. The borough's preferred style of crosswalk striping are the high-visibility "zebra" or "ladder" styles, which are the two options offered in SALDO. The borough has previously made use of stamped and dyed pavement to mimic brick paver crosswalks, however the high traffic of Main Street would likely cause visible wear quite quickly. For that reason, white painted crosswalks are preferred to stamped concrete.

There is also the question of how a sidewalk connects to a crosswalk. Every crossing in the Main

Relevant Regulations & Specifications

§ 85-98. Concrete Sidewalk Improvements

§ 85-99. Crosswalk Improvements
Chapter 83, Streets and Sidewalks



U-Line Detectable Warning Plate (U-Line H-5637R)



Above: Orange flags are stored on both sides of Main Street at its intersection with Third Street. Users are instructed to carry a flag while crossing to increase visibility—an innovative approach!

Below: A pedestrian demonstrating how to make use of the crosswalk flag system.



Street corridor features a curb ramp and each of these includes a detectable warning plate (DWP), which are the brick red plates with round bumps. These tactile bumps alert the visually impaired to the transition from sidewalk to crosswalk. The DWPs are of a uniform brick red coloring throughout the corridor, and any replacements should be as well. A minimum width of 36” is required by the ADA, however a width of 48” and a length of 24” is recommended. As crosswalks are added or replaced throughout the borough, each corner should feature a curb ramp facing each crosswalk (for a total of eight at a four-way intersection).

There are two traffic lights on Main Street, those being at the intersections of Main Street with Fourth and Sixth Streets, and each feature pedestrian-controlled buttons. These facilities are integral to the pedestrian crossing experience and are explored in detail in the following section.

Signalized Intersections

With Main Street being under PennDOT jurisdiction, it is their responsibility to evaluate the need for signalized intersections in the first place and to determine the necessary pedestrian accommodations at proposed and existing signalized intersections. These considerations require an engineering study, as specified by Section 4E of the Manual on Uniform Traffic Control Devices (FHWA), which states that, “an engineering study shall be conducted and engineering judgment exercised to determine pedestrian presence and accessibility. Therefore, all new and/or alterations to existing signalized intersections shall evaluate

pedestrian accommodation and ADA compliance.” In short, the addition of new features must be considered as part of this process. Accessible pedestrian signals (APS), facilities that audibly translate the walk/countdown/don’t walk signage, are one example of accessibility features that are lacking from Main Street at present and may be considered when replacements and alterations occur in the future.

As previously mentioned, there are only two signalized intersections in the Main Street corridor. The facilities at the intersection of Main and 4th Street are slated to be replaced in the very near future for a number of reasons. Apart from the fact that it simply looks outdated, it lacks the walk/don’t walk sign that is so important for pedestrians. The facilities at the intersection of Main and 6th Street were installed more recently and do not have the glaring deficiencies of the other, but the aesthetics and accessibility features may be upgraded in the future.

With all that said, though a municipality has little control over the functionality of signalized intersections, the borough can provide input on certain aesthetic considerations.

Signalized Intersection Guidelines

Traffic and pedestrian signals are of course utilitarian first and foremost, but that does not mean that the aesthetics should not be considered. Simple design choices at the time of installation, such as the color and material of the support structures, can vastly improve their appearance and allow them to integrate

with the existing built environment. Ideally, these facilities would match the coloration of the lampposts found throughout the corridor, hunter green, but solid black and galvanized steel are acceptable alternatives.

The design of the support structure should carefully be considered when replacements occur and new traffic signals are planned. Posts should feature a decorative base at minimum. Snap-on clamshell bases, as demonstrated in the image to the right, can be a cost-effective way to enhance existing poles. The “better” and “best” traffic signals in the images on the following page feature decorative painted support poles and arms. Although the borough doesn’t presently have any of a similar design, this would be the ideal if cost was not an inhibiting factor. Any associated electrical boxes should be painted to match and concealed if feasible.

Relevant Regulations & Specifications

§85-53. Street Intersection Design

§85-57. Sidewalks, Subsection J(6)

§85-58. Crosswalks, Subsection E

§ 85-122. Transportation Impact Study



Hapco “clamshell” bases can be added to existing support structures



The traffic signal at the intersection of Main Street and Fourth Street (pending replacement).

Good



The existing traffic signal pole and support arm at Main & 6th Street is constructed of galvanized steel

Better



A black, decorative traffic signal pole and support arm in Pottstown Borough

Best



A dark green, decorative traffic light pole and support arm in Glenside

Street Lighting

Well designed, pedestrian-scaled street lighting helps to create a safe and inviting experience for visitors. A well-lit commercial district may keep shoppers out later after dark, potentially increasing patronage of local businesses. As is the case for many of the streetscape design elements previously discussed, the areas of Main Street that were subject to the streetscape treatment feature uniform streetlamps. These streetlamps create a sense of place as they connect to the architecture on Main Street through their antique aesthetic. The blocks lacking decorative lampposts have a fairly common style of street lighting known as “cobra head” lighting. This type of fixture certainly offers functionality, but they are positioned much higher above ground level and are therefore not at the pedestrian scale. They also tend to illuminate a larger area than necessary, which may cause some spillover onto properties fronting on Main Street.

Street Lighting Guidelines

The SALDO requires that streetlamps along Main Street match the design of existing lamp posts on Main Street. This should be interpreted to mean that the streetlamps match the decorative streetlamps such as that in the image to the right. The streetlamps require a custom order and the full specifications are not listed here or included on the following page, but are available at Borough Hall upon request.

The existing streetlamps along Main Street are “pedestrian-scale” being just under 14 feet high, a height that maximizes their functionality while

Relevant Regulations & Specifications

§85-24 Preliminary Plan Submission Requirements, Subsection F

§85-57. Sidewalks, Subsection J(6)

§85-108 Outdoor Lighting



minimizing light intrusion onto neighboring properties. The round tapered fluted aluminum posts and cast aluminum structural base are a combined 10 feet in height and the globe adds 44 inches to the top. The lamppost is hunter green in color and the globe is dark green. The light fixture is downward facing and is full cutoff, meaning that light shines at a set angle outward and no light shines upward. The borough has begun utilizing LED bulbs for replacements and full replacement is planned in the future, as LED bulbs use far less electricity and have a much longer lifespan than older technology.

Streetlamps are subject to spacing requirements of Chapter 5, Lighting, of PennDOT's Design Manual (Publication 13M). The lampposts are staggered on opposing sides of Main Street and the spacing ends up being somewhat irregular, at intervals of roughly every 60-75 feet for lampposts on the same side of the street and half that distance when considering lampposts on both sides of the street.



Several streetlamps near Borough Hall.

		Specifications	Local Example
Globe	<p>Model/Type Penn Globe Newport 1000</p> <p>Measurements See specifications sheet</p> <p>Color/Finish Hunter Green #1016</p> <p>Placement Refer to PennDOT Publication 13M Chapter 5, Lighting <i>(current edition, as amended)</i></p>		
	<p>Model/Type Georgetown, Hapco</p> <p>Measurements See specifications sheet</p> <p>Color/Finish Dark Green, Powder Coat Finish</p> <p>Placement Refer to PennDOT Publication 13M Chapter 5, Lighting <i>(current edition, as amended)</i></p>		

Street Furnishings



An example of an outdoor café and in-ground planters in the core business district.

Street furnishings throughout the Main Street corridor can be employed as amenities that keep pedestrians comfortable while adding visual interest and enhancing the character of the community. Main Street very much has a defined character, which hinges on the historic architecture, so street furnishings should allude to the architecture in both material and style.

Due to the system whereby street furnishings are required during the land development process, as outlined below, and for ease of using this document, only benches, trash and recycling receptacles, bike racks, and planters will be explored in depth. Items such as clock towers will be less common, but when provided they should match the style and materials of other streetscape furnishings.

Street Furnishing General Guidelines

Furnishings throughout the corridor should generally be consistent and create a visual connection even when differing styles and materials are present. Main Street already has a preferred paint color for the metal lampposts, hunter green, and it is encouraged that this color be utilized either as the primary or accent paint color for metal furnishings. As an alternative to this, black metal either as a primary or accent color is acceptable. Natural wood or quality imitations can be utilized as a secondary material and, under some circumstances, a primary material. Plastic or resin imitations are discouraged on Main Street as

Relevant Regulations & Specifications

Subsection 79, Streetscape Standards, of the subdivision and land development ordinance requires that nonresidential and multifamily development supply adequate “streetscape and green area items” based on the scale of development proposed. In order to quantify the benefit of these items, a system is utilized that assigns each potential furnishing a category and a number of points; these are noted in the chart to the right. Four tiers of development are utilized to determine the required number of points:

1. Building additions and alterations require 4 points from any category, with no more than three of one item in Category B.
2. New Developments of 2,500 to 4,999 Gross Square Feet require 4 points from any category, with no more than three of one item in Category B.
3. New Developments of 5,000 to 14,999 Gross Square Feet require 8 points including at least one item from each category and no more than three of one item in Category B.
4. New Developments equal to or exceeding 15,000 Gross Square Feet and/or New Buildings Greater Than Four Stories require 12 points, including at least one item from each category.

This system allows the developer to review this list and choose the right mixture of items to meet their minimum requirement. It is both required and encouraged to offer a mix of furnishings so that no one item is overused. Generally speaking, the green area items will not be reviewed in this document unless it relates to another topic of discussion.

Category	Item	Points
A	Hanging basket	1
A	Window box	2
A	Additional in-ground planting area	2
A	Street planter	2
A	Roof garden/green roof	3
A	Green wall	3
B	Bench	2
B	Bicycle rack	2
B	Trash and recycling receptacles (one of each)	2
B	Public art (mural, sculpture, etc.)	3
B	Public drinking fountain	3
B	Display fountain	3
B	Clock tower	3
B	Decorative paving	1

the material does not generally convey a historic or antique feel. Since street furnishings are offered for use by the public or otherwise in or adjacent to the public right-of-way, materials should be sturdy and graffiti/vandalism resistant and must be affixed to the ground per manufacturer specifications.

Benches

Benches and public seating areas are almost entirely absent throughout the business district and, for that matter, all of Main Street. Public seating areas are especially important for older persons and those with limited mobility, as it allows them a place to take a break to rest. The omission of seating areas potentially limits the amount of time that a person is able to spend on Main Street and may make them more likely to drive between destinations rather than walking between their destinations.

Benches are most sorely needed in the business district, but they would be a great addition anywhere throughout the corridor. A few businesses offer outdoor seating areas, but it is not clear if these are for the exclusive use of patrons. Siting benches in more clearly public areas would encourage their use.

Commercial benches are most commonly 6 or 8 feet in length, often have the option to have a back or be backless, and can have armrests to separate seats. Many types of designs are appropriate for Main Street, and a handful of models are noted on the following pages.



Unique benches with a pull-out tabletop are offered outside of this Main Street business, but the step is a barrier to accessibility.

Trash & Recycling Receptacles

The borough has worked to provide trash receptacles throughout the business district through the installation of pole-mounted receptacles and with a larger trash can at the intersection of Main and 3rd Street. No public recycling bins are provided in the borough.

The primary inhibiting factor related to the provision of public trash receptacles is the manpower required to empty them when needed, which varies greatly from week to week and which depends on staff availability. Businesses should consider providing trash and recycling receptacles outside their doors, particularly if they offer take-out food and beverage service.

Businesses should monitor the trash receptacles

outside of their business and empty their own and, on the other hand, alert the borough when public receptacles are full.

A wide range of trash and recycling receptacles could be employed for business purposes, though it is the borough's intent to continue to monitor if pole-mounted trash receptacles are adequate to meet demand given the relatively narrow sidewalk width. Larger trash cans should be sited in more highly trafficked areas and near businesses where patrons may generate trash. The material, color, and overall design should be consistent with that of other street furnishings.



An example of a pole-mounted trash receptacle near Borough Hall.



The borough has installed trash receptacles in high-traffic areas along Main Street

Bike Racks & Bollards

Bike racks are another furnishing that are generally lacking from Main Street, and that is in part due to the limited bicycle traffic on Main Street itself. The street is narrow which limits both the actual and perceived safety (comfort) of prospective users. Since bicycles are not encouraged on the sidewalk, it would be most appropriate for cyclists to utilize side streets and alleys for the majority of their trips. Siting bike racks behind Main Street businesses, particularly

when back or side entrances are provided, would encourage more widespread use of bicycles. When sited within the sidewalk, it is necessary to ensure that an adequate clear pathway remains. Bike racks can range in design but should generally be consistent with other furnishings. Bike racks behind or to the side of buildings or otherwise located on private property need not strictly adhere to the guidelines.

Bike racks can double as bollards, as demonstrated by the examples on the following pages, and can create a physical barrier between the sidewalk and vehicular traffic. With that said, due to the on-street parking that also separates the street and sidewalk, bollards may not be necessary in many locations.



Bike & Sol, located on Main Street, offers a free community bike share

Planters

Property owners should consider providing planters in high-visibility areas where they do not impede pedestrian traffic. Suitable areas would be along the curb (in similar locations to street trees), along the building foundation, as hanging baskets or window boxes. Planters can add a bit of color and “curb appeal” throughout the warm weather seasons and can be taken inside during the winter, or evergreens can be utilized for year-round greening.

Planters located in the sidewalk should be sized according to what space permits, but three to four feet in diameter is ideal. Designs can vary significantly, especially when considering the many different options available, but generally metal, wood, ceramic, and concrete planters would be appropriate. Plant

species selection will also vary according to personal preference, though native plants are preferred and the List of Approved Plants should be consulted. Evergreens and perennials can be utilized where consistency is wanted, and annual flowers or other decorative plants can be replaced each year. Either way, continued maintenance will be necessary. Consistent watering and weeding is a given, and dead/dying plants should be removed and replaced as often as necessary. When planters look similar to trash cans, occasional trash removal may also be required.



The raised planting beds at the intersection of Main and 3rd Street are beautiful; however, there are limited opportunities to install others given the narrow sidewalk on Main Street.

Green Metal



FMBF-324, Victor Stanley Steelsites™
Collection Model



U-Line H-2125G and U-Line H-1857G
45-Gallon Wire Mesh Trash Can and Dome Lid
Note: this model is used at Main/3rd Street



Model A-36, Victor Stanley Ironsites™

Wood or Metal with Wood Accents



FM-324, Victor Stanley Framers
Modern™ Collection



C-10, Victor Stanley Classic Collection



Wooden planter at the Bank Street Parking lot

Black Metal



H-3020 Planter, H-3018 Bench with Back, and H-3019 Bench without Back by U-Line



Model EB-236SD, Victor Stanley Economy Collection



BRBS-103 (left) and BRBS-104 (right)
Victor Stanley Cycle Sentry™ Collection

Arts and Culture Furnishings



Ornate clock with 'Pottstown' label and planters



A decorative bike rack in nearby Bethlehem, PA
An attached sign notes its function
East Greenville could identify its own "brand"
like Bethlehem's star motif.



Children's art on a planter on High St. in Pottstown

Street Trees

Street trees are a dominant feature on Main Street and an integral aspect of the streetscape. Street trees directly benefit Main Street through the added beauty, the shade offered, and by the associated cooling offered. Furthermore, community trees are estimated to yield two to five times the investment cost of planting and maintenance (US Forest Service) through the manifold benefits offered: cleaner air, lower heating and cooling costs, carbon sequestration, noise absorption, improved water quality, storm water control, habitat value for animals, traffic calming, wind screening, improved physical and mental health, and increased property values.

Unfortunately, it is common for street trees to experience less than ideal growing conditions that limit their health and longevity. They are subject to heat stress, drought, physical impacts from vandalism or vehicle crashes, and receive polluted air and water. On top of these factors, street trees are generally provided with only a limited volume of planting soil while remaining surrounded by highly compacted soils that inhibited root spread. When sited in small planting areas such as they are, street tree roots must navigate under the sidewalk to seek out additional soil volume. Many of the issues that plague street trees can be avoided with proper planning at the time of planting, while other issues may be managed through ongoing care and maintenance.

Relevant Regulations & Specifications

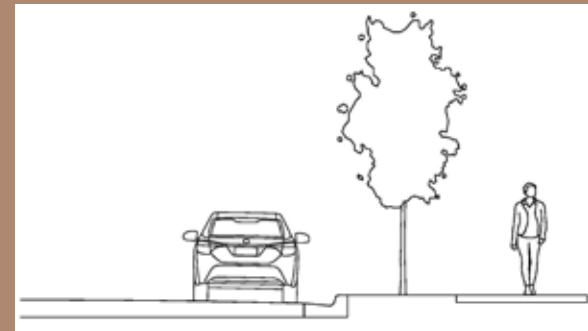
§§ 85-57. Sidewalks, Subsection J(2) and (4)

§ 85-67. Street Trees

Appendix A: List of Approved Plants

Chapter 83, Streets and Sidewalks

§ 83-28, Restrictions Regarding Trees and Shrubbery



Tree Well Specifications

Planting Soil Depth: 30 inches minimum

Soil Composition: 20-30% Organic Material & 70-80% topsoil

Soil Volume Requirements (Planting Areas < 1,000 ft²): Shade or Canopy Trees: 1,200 cubic feet
Evergreen or Ornamental Trees: >50% require 900 cubic feet, balance require 600 cubic feet

Dimensions: four feet by four feet, total of 16 square feet

Surface: perkEpave™ tree surround (or equivalent product)

Street Tree Guidelines

The borough is committed to improving and expanding the urban forest, as demonstrated by the Shade Tree Commission's work and by adopted legislation. The SALDO is the primary ordinance that dictates street and shade tree requirements: street trees must be provided along both sides of existing and proposed streets, both sides of driveways that serve five or more residential dwellings or two or more nonresidential uses, and along walkways. One tree must be provided for every 30 feet of street frontage, though spacing need not be uniform, and tree pits must be spaced no less than every 40 feet along Main Street. Outside of Main Street, street trees may be planted within five feet of the outer edge of the sidewalk (within a front yard) where no planting strip is provided.

The design of tree pits is important to a trees health and longevity. Generally, tree pits must have an area

of 21 square feet with a minimum width of 5 feet; this drops to 4 feet by 4 feet along Main Street both to reflect existing conditions and due to right-of-way limitations. The borough is in the process of expanding the use of perkEpave™, a permeable paving material made of recycled tires, to replace tree grates and now requires the same treatment for new street trees.

Soil composition, quality, depth and volume are important factors that often determine the success or failure of the street tree. As discussed previously, urban soils are often too compacted and poor quality to support street trees; therefore, the minimum soil volumes and design options detailed below must be considered.

Approved tree species are listed in Appendix A, List of Approved Plants, of the SALDO and are categorized based on their size, characteristics, and suitability



Step 1 – Remove Existing Soil

Remove existing soils to depth of 4" - 6" below elevation of existing concrete, where possible and without damaging existing tree roots.



Step 2 – Place Clean #57 Stone

Place stone and tamp to 1.5 inches below existing concrete.

No geotex fabric required around the root ball area of the tree.



Step 3 – Coat Concrete with Binder

Coat mating surface with binder to assure perkEpave adheres to the surface and eliminates tripping hazards that may develop over freeze thaw cycles.



Step 4 – Mix & Place perkEpave

Mix 1 bag of rubber with 1 bag of stone and 5 quarts of binder (producing 16 sq. ft. - 1.5 thick) and place over stone; screed and finish with float coated with form release.

Permeable paving installation guidance (perkEpave)

for planting based on the presence or absence of overhead wires. These factors should be considered when determining the right tree for a specific location. The property owner has a lot of latitude when it comes to tree selection; however, the Borough Shade Tree Commission can assist with this process and recommend certain species. It is encouraged that a diversity of tree species be selected in order to promote biodiversity and improve resilience to hazards such as invasive insects (e.g., Emerald Ash Borer), disease (e.g., anthracnose), or other unforeseen issues (e.g., wind damage). Street trees should also be drought- and salt-tolerant and should provide a wide canopy to shade the sidewalk and street.

Certain steps can be taken to set a newly planted tree up for success. Freshly planted trees require up to two years for roots to become fully established, so it is important that they received adequate water during this time (May-October). During the first few years, pruning should be limited to removing dead or dying branches and waterspouts. For additional information on tree planting and care, please refer to Appendices B, C, and D.

Structural Soil

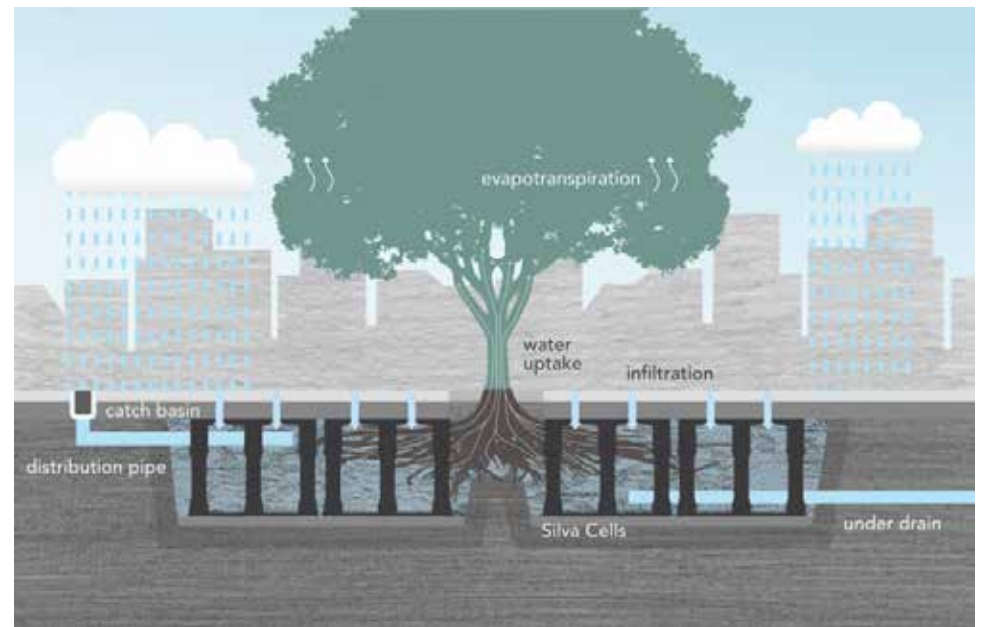
Inadequate soil volume and compacted soil are the greatest barriers to a street tree's success. Both of these issues can be addressed through the addition of a structural soil, which is made up of material that is able to support the weight of the sidewalk while allowing tree root penetration and stormwater infiltration. The SALDO defines structural soils as, "A soil medium that can be compacted to support pavement and installation requirements while accommodating tree root growth. It is a mixture of gap-graded gravels made of crushed stone, clay loam,

and a hydrogel stabilizing agent to keep the mixture from separating." Structural soils are recommended in area with large areas of impervious surfacing, such as Main Street.

Suspended Pavement System

A suspended pavement system is another option that can supplement the use of structural soils. A suspended pavement system involves the installation of a series of support structures beneath the pavement upon which the pavement or sidewalk rests. The support structures are staggered and the void area is filled with a combination of structural and planting soils which allow stormwater infiltration and root penetration. Stormwater can be directed into the system, and an underdrain may be provided to remove excess stormwater.

By allowing trees to spread their roots under the sidewalk, their health and longevity is drastically improved. The graphic to the bottom right provides an overview of DeepRoot's 'Silva Cell' system which is available for purchase.



Approved Street Trees (List of Approved Plants)

SHADE OR CANOPY TREES SUITABLE UNDER OR NEAR POWER LINES

- 'Robin Hill' Juneberry (*Amelanchier arborea* 'Robin Hill')
- Serviceberry (*Amelanchier Canadensis*)
- 'Native Flame' American Hornbeam (*Carpinus caroliniana* 'Native Flame')
- Eastern Redbud (*Cercis canadensis*)
- Alternate-Leaf Dogwood (*Cornus alternifolia*)
- Flowering Dogwood (*Cornus florida*)
- Sweetbay Magnolia (*Magnolia virginiana*)
- Mt. Fuji Cherry (*Prunus serrulata* "Shirotae")
- Autumn Flowering Cherry (*Prunus subhirtella* "Autumnalis")
- Japanese tree lilac (*Syringa reticulata* "Ivory Silk")
- Japanese tree lilac (*Syringa reticulata* "Summer Snow")
- City Sprite Zelkova (*Zelkova serrata* 'City Sprite')
- Wireless Zelkova (*Zelkova serrata* 'Schmidtlow')

SHADE OR CANOPY TREES SUITABLE NEAR PAVING AND PARKING LOT GREENING

- 'Goldspire' Sugar Maple (*Acer saccharum* 'Goldspire')
- River Birch (*Betula nigra*)
- Columnar European Hornbeam (*Carpinus betulus* 'Columnaris')
- American Hornbeam (*Carpinus caroliniana*)
- Eastern Redbud (*Cercis canadensis*)
- Princeton Sentry Ginkgo (*Ginkgo biloba* 'Princeton Sentry')
- Magyar Upright Ginkgo (*Ginkgo biloba* 'Magyar')
- Thornless Honey Locust (*Gleditsia triacanthos* "inermis")
- Black Gum (*Nyssa sylvatica*)
- Bloodgood London Planetree (*Platanus x acerfolia* "bloodgood")
- White Oak (*Quercus alba*)
- Scarlet Oak (*Quercus coccinea*)
- Shingle Oak (*Quercus imbricaria*)
- Red Oak (*Quercus rubra*)
- Littleleaf Linden (*Tilia cordata*)
- Bald Cypress (*Taxodium distichum*)
- Zelkova (*Zelkova serrata*)



Zelkova Trees on Main Street



Cherry Trees on Main Street

Site Screening

Walls and Fences

Retaining walls are a particularly dominant feature of the streetscape along Main Street, and their presence on nearly every block creates a sense of continuity throughout the corridor. Retaining walls and fences physically indicate the separation between public and private property, which can be important when buildings are built as close to the sidewalk as they are.

Many properties along Main Street feature the same uniform, low concrete wall along the sidewalk. These walls feature decorative caps and posts every so often, and there are recessed entrances connecting the sidewalk to building entrances. Several properties have retaining walls of different materials, but these are generally limited to brick and modular masonry. All told, there is roughly 2,000 linear feet of retaining walls along Main Street; this amounts to just under 30% of the length of the sidewalk. A handful of properties have fences, which are generally wrought iron or the like, but these are a far less common feature on Main Street.

Wall and Fence Guidelines

The zoning ordinance permits walls and fences up to four feet in height along a front property line. Corner lots, those located at intersections, must ensure that a clear sight triangle is provided which may limit placement and/or design of walls/fences. When a new off-street parking area is proposed abutting a street or

sidewalk, the SALDO offers two options for screening: a three foot high masonry or decorative metal wall or fence with limited landscaping, or an eight foot wide full landscape buffer.

With the ubiquitous concrete retaining walls being such a defining feature of Main Street, it is recommended that these be proactively maintained and repaired when practical. As cracks appear, they should be addressed expeditiously as the freeze-thaw cycle and vegetation growth can quickly expand cracks and make repairs infeasible. Although the in-kind replacement of damaged or removed walls would be ideal, the cost may be prohibitive. Brick and mortar or modular masonry retaining walls are also acceptable alternatives to concrete.



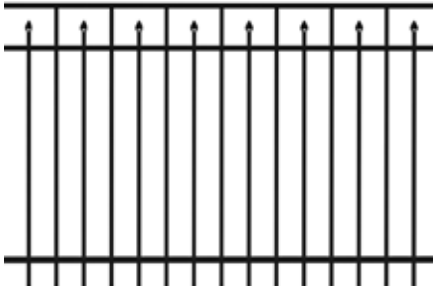

Fences are not extremely common along Main Street, perhaps due to the prevalence of retaining walls that serve a similar purpose, but where they exist they are generally constructed of wrought iron. The retention, repair, or in-kind replacement of any such fences is generally recommended. Alternatively, aluminum and steel fencing in similar styles are readily available and less costly. Black is generally preferred, however the white fence featured in the image to the right on the following page is quite attractive.

Relevant Regulations & Specifications

§ 85-71. Parking Greening and Landscaping Standards, Subsection D

§ 95-29 Categories of Permitted Uses, Subsection A(7)



Galvanized Steel Fence		Retaining Wall Example 1	
<p>Model/Type Northeast Fence & Ironworks Westmoreland II 'Finial'</p> <p>Measurements Height: 36" Panel Width: 6' or 8'</p> <p>Material G-90 galvanized steel</p> <p>Color/Finish Black, powder coated</p>		<p>Model EP Henry Diamond ProWall & Cap</p> <p>Measurements 18" x 9" x 8" No more than 48" in height</p> <p>Color/Finish Pewter Blend (right), Dakota Blend, or Harvest Blend</p>	
Aluminum Fence Example		Retaining Wall Example 2	
<p>Model/Type Independence Aluminum Fencing, Universal Spear Top</p> <p>Measurements Height: 36" Panel Width: 6' or 8'</p> <p>Material Aluminum Alloy</p> <p>Color/Finish Black, powder coated</p>		<p>Model Unilock Lineo™ Dimensional Stone</p> <p>Measurements 15 3/4" x 3 7/8" x 7 7/8" No more than 48" in height</p> <p>Color/Finish Sierra (right), Almond Grove, or Limestone</p>	

Front Yard Landscaping

While commercial buildings along Main Street are built near or up to the sidewalk, residences are commonly set back 10-20 feet from the sidewalk edge. Small front yards appear in these situations, which signal the separation between public and private property. As previously noted, this separation can be further reinforced by retaining walls or fences and through front yard landscaping. When new development occurs, front yard landscaping should be provided so that the new building blends in with neighboring properties and the established streetscape. These features are commonplace along Main Street, and their continued upkeep should be promoted.

The design of the area between the sidewalk and the building is essential and can contribute to the street's character. Landscaping helps to soften the mass of a building and can add some variation that makes it more visually attractive. It can also create a sense of privacy. Developed areas with large amounts of impervious surfacing also benefit from increased stormwater infiltration and retention in planting areas, and this function can be improved through downspout planters or even small rain gardens.

Front Yard Landscaping Guidelines

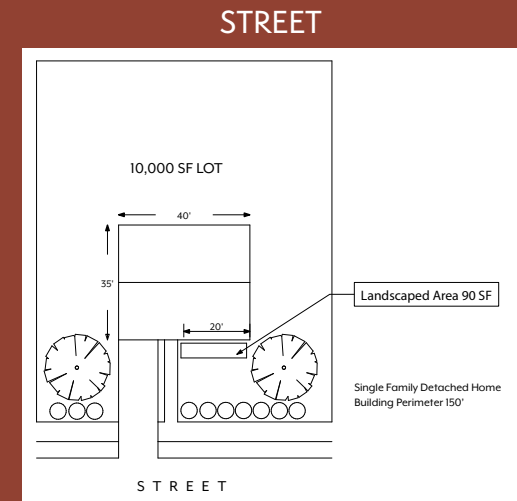
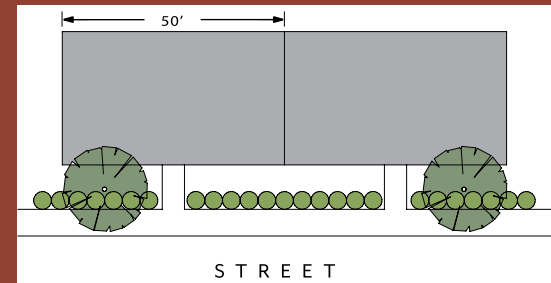
The subdivision and land development ordinance establishes specific requirements for front yard landscaping for nonresidential and residential development. Appendix A of the SALDO, List of Approved Plants, contains a list of permitted plants

Relevant Regulations & Specifications

85-68. Landscaping Requirements for Nonresidential Uses

§ 85-69. Landscaping Requirements for Residential Uses

Appendix A, List of Approved Plants



Example of low plantings in a shallow front yard

of varying types. These low shrubs, wildflowers, perennials, native grasses, and trees are generally recommended within the front yard and building foundation areas. The recommended species are hardy and naturally drought and salt-tolerant.

As stipulated in the SALDO, nonresidential developments must provide 25% of the area between a façade and the sidewalk as a pervious planting area. The required planting area(s) must be a minimum of 10 feet in width and 150 square feet in size. Additionally, one canopy tree or two understory trees are required per 50 feet of façade and five shrubs per 20 feet of façade. With all that said, if the front façade of a building is located such that it wouldn't allow the specified planting area, then the required plantings

may be located elsewhere on-site; this would likely be the case for nonresidential and mixed-use buildings where the front façade may be built up to the sidewalk.

Residential developments are required to provide 30 square feet of planting area per 50 feet of building perimeter, where grasses and wildflowers/perennials from the list of approved plants are required to be located. Five shrubs are also required per 20 feet of building façade facing a street. Lastly, one canopy tree is required per 10,000 square feet of lot area, plus additional trees based on the type and number of dwelling units built. The required landscaping reflects existing conditions throughout the corridor, adds beautiful natural features, and provides privacy for residents.



This business offers a small vegetated plaza between the entrance and the sidewalk.

Shrubs Suitable for Building Foundation, Front Yard Landscaping or Parking Lot Greening (List of Approved Plants)

Groundsel-tree (*Baccharis halimifolia*)

Littleleaf Boxwood (*Buxus Microphylla*)

Summersweet (*Clethra alnifolia*)

Dwarf Fothergilla (*Fothergilla gardenia*)

Arnold Dwarf Forsythia (*Forsythia*)

Sunburst Golden St. Johnswort (*Hypericum frondosum*
'Sunburst')

Inkberry (*Ilex glabra*)

"Henry's Garnet" Virginia Sweetspire or 'Little Henry'
(*Itea virginica*)

Northern Bayberry (*Myrica pennsylvanica*)

'Low-Grow' Aromatic Sumac (*Rhus aromatic*)

'Ratko' Double Knockout Rose (*Rosa hybrid*)

'Goldflame' Bumald Spiraea (*Spiraea x bumalda*)

Arrowwood Viburnum (*Viburnum dentatum*)



Northern Bayberry (*Myrica pennsylvanica*)



Dwarf Fothergilla (*Fothergilla gardenia*)



Summersweet (*Clethra alnifolia*)



'Sunburst' Golden St. Johnswort (*Hypericum frondosum* 'Sunburst')

Wildflowers & Grasses

(List of Approved Plants)

Big Bluestem Grass (*Andropogon gerardi*)

Little Bluestem Grass (*Andropogon scoparius*)

Butterfly Weed (*Asclepias tuberosa*)

Aster (*Aster pilosus*)

White Aster (*Aster simplex*)

Sedge (*Carex sp.*)

Canada Wild Rye (*Elymus canadensis*)

Wild Bergamot (*Monarda fistulosa*)

Switchgrass (*Panicum virgatum*)

Slender Mountain Mint (*Pycnanthemum tenuifolium*)

Black-eyed Susan (*Rudbeckia hirta*)

Old Field Goldenrod (*Solidago nemoralis*)

Showy Goldenrod (*Solidago speciose*)

Indian Grass (*Sorghastrum nutans*)

Red Top (*Tridens falvus*)

Culver's Root (*Veronicastrum virginicum*)



Butterfly Weed (*Asclepias tuberosa*)



Culver's Root (*Veronicastrum virginicum*)



Black-eyed Susan (*Rudbeckia hirta*)



Wild Bergamot (*Monarda fistulosa*)

Ornamental Trees

(List of Approved Plants)

Note: other trees from the List of Approved Plants may also be selected based on planting area/site conditions



Paperbark Maple (*Acer griseum*)



Eastern Redbud (*Cercis Canadensis*)

Trident Maple (*Acer buergerianum*)

Paperbark Maple (*Acer griseum*)

Three-flower Maple (*Acer triflorum*)

Shantung Maple (*Acer truncatum*)

Serviceberry (*Amelanchier Canadensis*)

American Hornbeam (*Carpinus caroliniana*)

Eastern Redbud (*Cercis canadensis*)

Chinese Fringe Tree (*Chionanthus retusus*)

Alternate-Leaf Dogwood (*Cornus alternifolia*)

Flowering Dogwood (*Cornus florida*)

Kousa Dogwood (*Cultivars*) (*Cornus kousa*)

Rutger's Dogwood (*Cornus florida x Cornus kousa*)

Cornelian Cherry Dogwood (*Cornus mas*)

Japanese Cornel Dogwood (*Cornus officianalis*)

American Smoketree (*Cotinus obovatus*)

Thornless cockspur hawthorn (*Crataegus crusgalli var. inermis*)



Chinese Fringe Tree (*Chionanthus retusus*)



Flowering Dogwood (*Cornus florida*)

English hawthorn (*Crataegus laevigata* “*Superba*”)

Lavalle hawthorn (*Crataegus x lavallei*)

Washington hawthorn (*Crataegus phaenopyrum*)

Winter king hawthorn (*Crataegus viridis* “*Winter King*”)

Common Witchhazel (*Hamamelis virginiana*)

Chinese Hybrid Witchhazel (*Hamamelis mollis*)

Sweetbay Magnolia (*Magnolia virginiana*)

Adirondack crab apple (*Malus* “*Adirondack*”)

Prairifire crab apple (*Malus* “*Prairifire*”)

Professor Sprenger crab apple (*Malus* “*Professor Sprenger*”)

‘Okame’ Cherry (*Prunus x ‘Okame’*)

‘Yeodensis’ Cherry (*Prunus x ‘Yeodensis’*)

Columnar Sargent Cherry (*Prunus sargentii* ‘*Spire*’)

Higan Cherry (*Prunus subhirtella var. autumnalis*)

Chokecherry (*Prunus virginiana*)

Canada red chokecherry (*Prunus virginiana* “*Schubert*”)

Japanese tree lilac (*Syringa reticulata* “*Ivory Silk*”)

Japanese tree lilac (*Syringa reticulata* “*Summer Snow*”)



Winter King Hawthorn (*Crataegus viridis* “*Winter King*”)



‘Ivory Silk’ Japanese Tree Lilac (*Syringa reticulata* ‘*Ivory Silk*’)



Cornelian Cherry Dogwood (*Cornus mas*)



American Smoketree (*Cotinus obovatus*)

Considerations for Existing Buildings & New Construction

Many styles of architecture have come and gone throughout the borough's history, and many of these styles are still represented today. The borough has retained examples of Beaux Arts, Colonial Revival, Gothic Revival, Italianate, Romanesque, Second Empire, Victorian (Late and Queen Anne), Craftsman Bungalow, and other 'modern' styles.

In addition to the many architectural styles, Main Street also features a healthy mix of uses and acts as the commercial hub of the borough. Uses vary along Main Street largely due to the historic pattern of development, but subsequent zoning regulation further solidified this. Since the form of a building often implies its function, nonresidential buildings may stick out among residential buildings; this distinction is blurred somewhat with the adaptive reuse of many residential buildings for mixed use. Attached and detached single-family homes are the most prevalent use accounting for two out of every three buildings on Main Street (107 of 163). The remaining buildings include 18 multifamily buildings, 4 retail properties, 25 mixed use buildings, 8 institutional properties, an office building, and an industrial building.

Main Street crosses three zoning districts: R-2 Residential, BR Borough Residential, and BC Borough Commercial. The R-2 Medium-Density Residential District allows for single-family detached and semi-detached (twin) homes, while the BC and BR allow those uses as well as single-family attached (townhomes), two-family homes (duplexes), apartment buildings, nonresidential and mixed uses.

Relevant Regulations & Specifications

§ 85-81. Residential Design Standards

§ 85-82. Nonresidential Design Standards

Chapter 95, Zoning, Article VI, R-2 Medium-Density Residential Districts; Article IX, BC Borough Commercial Districts; Article X, Borough Residential Districts



The following guidelines and recommendations are split between those for existing buildings and those for new construction. Some guidelines also include provisions specific to the use of the building (generally residential versus commercial). Any new development must consider the character of the community and should draw inspiration from the existing, historical architecture. New development should not seek to mimic high architectural styles, as this creates a false sense of historical significance, but should still aim to connect to the existing built environment through the use of colors and materials.

Existing Buildings

Main Street's unique sense of place is largely centered on the architecture that seems to capture a point in time, and this is no illusion: very few new buildings have been constructed on Main Street in the last 70 years. The rich past of the borough lives on through its architecture and so the retention of existing buildings should be among the highest of priorities.

In all instances, it is recommended that the unique architectural features and details of existing building be retained whenever possible. When renovations are necessary, in-kind replacement should be the first choice. Many building materials used in the past may be unavailable today, and in these cases replicas can instead be used.

Many buildings have been altered for various reasons since their initial construction and some of these alterations have degraded the architectural integrity of buildings. If alterations have been made that detract from the character of the building, such as an enclosed porch that was originally open, these should be undone and renovated with more appropriate



The Grand Theater is a prime example of modern architecture

treatments where possible. Ideally, any renovation would be based on historical photographs of the building in question, but a historic preservationist or architect would be able to identify appropriate treatments for most buildings.

The borough has a solid foundation of architectural gems that will be able to shine more brightly as restorations occur. The retention of buildings will maintain the borough's established character into the future, even as new development occurs.

Materials and Colors

Most architectural styles feature specific materials and colors that were integral to the movement. The most common façade materials found along Main Street include stucco and brick, both of which were used in many different architectural styles. Regardless of architectural style, any unpainted masonry should remain unpainted and should instead be proactively repaired and repointed. Previously painted brick may be repainted with the same or a more appropriate paint color.

Certain architectural styles favored certain colors and materials:

- Although not required, it is encouraged that a historically appropriate color is selected. Many paint manufacturers, such as Benjamin Moore and Sherwin-Williams, offer historical color palettes with a great number of options and examples.
- Beaux Arts, Romanesque and Craftsman Bungalow generally featured exposed structural material, such as brick or stone, which would not have been painted.

Colors Shown

BODY	TRIM	ACCENT	ACCENT 2
SW 2804	SW 2805	SW 0023	SW 2838
Renwick Rose Beige	Renwick Beige	Pewter Tankard	Polished Mahogany

Source: "America's Heritage" by Sherwin-William

- Colonial Revival buildings were generally painted with light pastels (white, light blue, grey and yellow) and often had white trim and shutters painted green, white, or black.
- Gothic Revival buildings were generally painted with warm earth tones (reds, browns, and yellows) with trim painted in a complementary color.
- Italianate and Second Empire style buildings were generally painted with pale earth tones (greys, browns, and red-brown hues) with trim within the same color family but several shades darker.
- Victorian buildings often featured more vibrant colors, including greens, oranges, and citrine; trim was generally a contrasting, dark color.

Front Entrances & Storefronts

Nearly every building along Main Street, whether commercial or residential, features a fairly grand main entrance facing the street. These entrances are meant to be inviting to visitors and patrons walking or driving along the main thoroughfare of the borough, Main Street. As is the case for most aspects of existing buildings, these historic entrances should be rehabilitated and enhanced rather than replaced whenever possible.

Front porches are a defining feature for most residences facing Main Street. There are porches of various sizes and designs, but most run along the full length of the front façade and many wrap around at least one side of the building. Wooden support



Examples of an unaltered front porch (right) and an addition or potentially enclosed porch (left)

columns, especially those of unique shapes, should be replaced in-kind or with a similar replacement; unpainted wood is not encouraged. Any masonry columns should receive proactive maintenance to ensure structural integrity. When porch roofs require repair, the same roofing material as is currently in use is likely the most appropriate treatment; that said, asphalt shingles are generally appropriate. If a previously open porch has been enclosed, reverting to the open porch would be ideal, though this is admittedly unlikely to occur in most cases.

Buildings that were historically commercial in use, or have been repurposed for such, often have large storefront display windows. Storefront windows are meant to allow passersby to window shop and get a feel for what is inside. Signage on windows is

appropriate and encouraged, but a high percentage of window transparency must be maintained.

There are several buildings on Main Street that have obviously had modern storefronts built onto preexisting buildings. If a full renovation is planned, then it is encouraged that the storefront be restored to its former design. Any restoration should be based on historical photographs or, if such isn't available, consultation with a design professional. When only minor rehabilitation is planned, a modern storefront should receive a treatment (paint or materials) that allows it to better blend in with the existing building. The addition of fabric awnings may be an appropriate treatment for some buildings.

Windows

Window replacements should always be in the same shape and size as the existing windows and any unique features such as lintels and sills should be maintained. Replacing old windows with smaller windows and filling in the newly created void space is discouraged, as this detracts from the established architectural rhythm of the building. Removing and filling in entire window openings should also be avoided.

Replacement windows should share a similar design to that of existing windows, especially if not all windows are being replaced at once. Attention should be paid to manner of opening (e.g., single-sash vs. casement) and the number of window panes. Where shutters exist, they should be of an appropriate size that they would cover the windows if closed (even if inoperable).



*Left: the replacement windows are a similar size to the original, but the introduced siding and lack of lintel detract from the building.
Right: the replacement window is significantly smaller than the original, which required filling the new void space with siding.*



Decorative cornices and lintels along adjacent buildings on Main Street

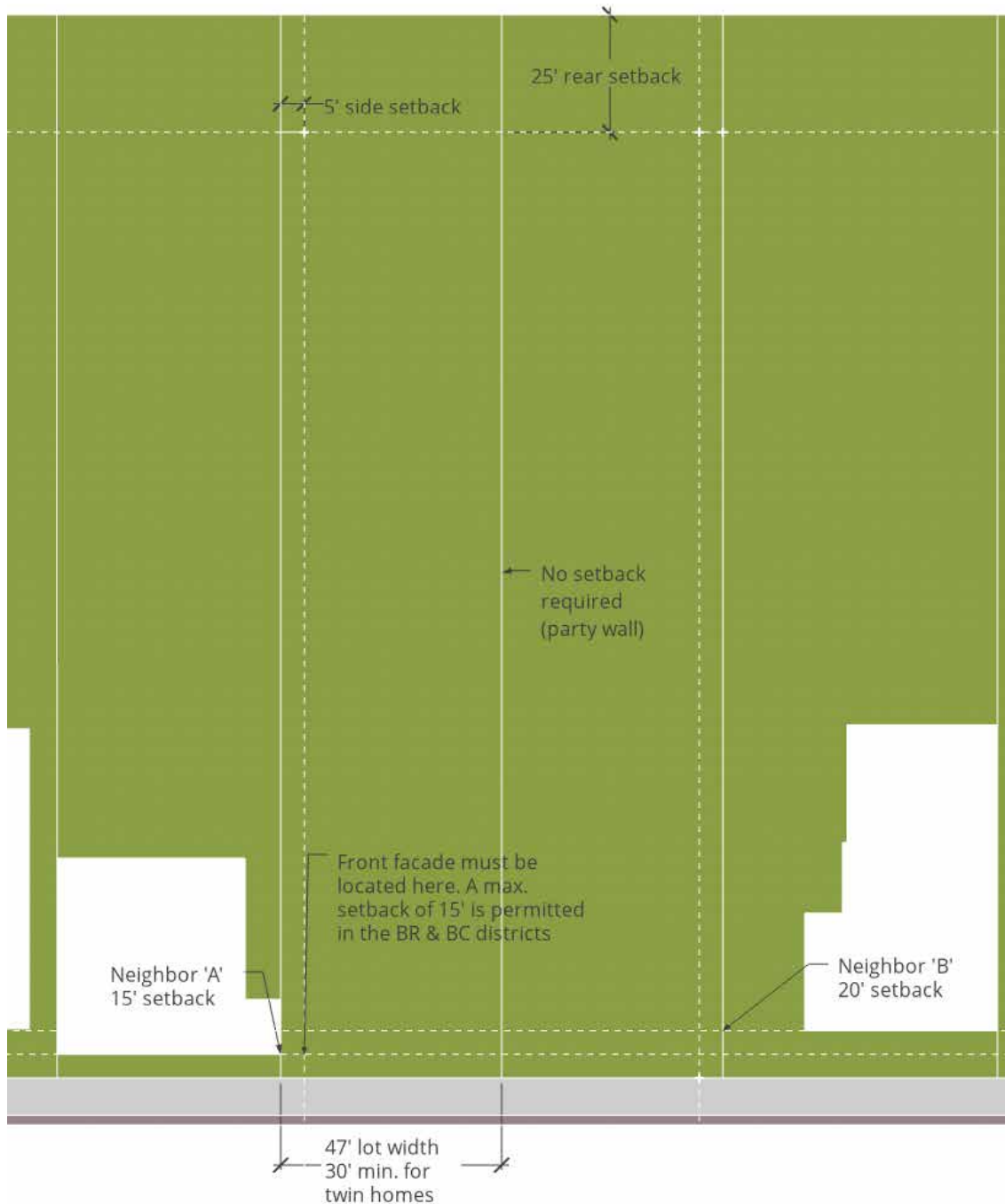
Roofs & Rooflines

Roofs are an often overlooked architectural feature, but they are defining features for certain architectural styles: Queen Anne homes feature multi-gabled roofs and every Second Empire house has a mansard roof. Given that roof form is a critical component of a certain architectural styles, the overall form should be retained in all cases. Some roofs may also feature unique material, such as slate, and in those cases repairs should be made in-kind. If a modern roofing material, such as asphalt shingle or metal, has been used then use of the same is encouraged.

Many buildings on Main Street also have decorative elements along the roofline such as brackets and cornices, which are horizontal molding along an overhang. Many buildings have retained these features, while others may be hidden under an aluminum cap. Ideally, any original material can be repaired and restored. If deteriorated beyond restoration, historically appropriate replacements are encouraged. Some companies specialize in fabricating replicas of architectural features in modern materials by taking a cast of the original.



This building has retained the original cornice and window openings



Example: New Twin Homes in the BR or BC District

New Construction: Site Layout and Building Design Considerations

Because Main Street is almost entirely built-out, it is crucial that any new construction fits in with the established architecture in order to retain the character of the corridor. New construction should not be made to imitate historic buildings, but rather draw inspiration from them. The convergence of site layout and building massing, form, materials, and architectural features can create a building that either blends in or sticks out. The recommendations of this section aim to encourage infill development, being new buildings/development within a built-out area or on a developed lot, which complements and enhances the Main Street corridor.

Site Layout Considerations

The layout of a site, that is the organization of buildings and other features, sets the groundwork for how, or even if, infill development will fit in with the established pattern of development. The layout of a lot varies according to the use of the lot and applicable dimensional standards, both of which vary by zoning district. The most important dimensional standards as they relate to the streetscape include the minimum lot area, minimum lot width, the front setback and, to a lesser extent, the side setbacks; please refer to the applicable zoning district for more details on these factors. These dimensional standards work in concert

to ensure that if a new lot were created today and a new building built, the lot and associated building would fit in with the existing built environment. That is to say that a newly created lot would be slim but deep and principal buildings would be situated near the sidewalk; narrow front and/or side yards may be offered, depending on the proposed use.

In order to maintain the established streetwall, it is generally encouraged that the front façade of a new building have an equivalent setback to that of its neighbors. In both the commercial and residential setting, attached buildings are the norm on Main Street. Detached buildings are most common west of the core commercial area, towards the boundary with Upper Hanover Township, and in these locations side yards should be provided.

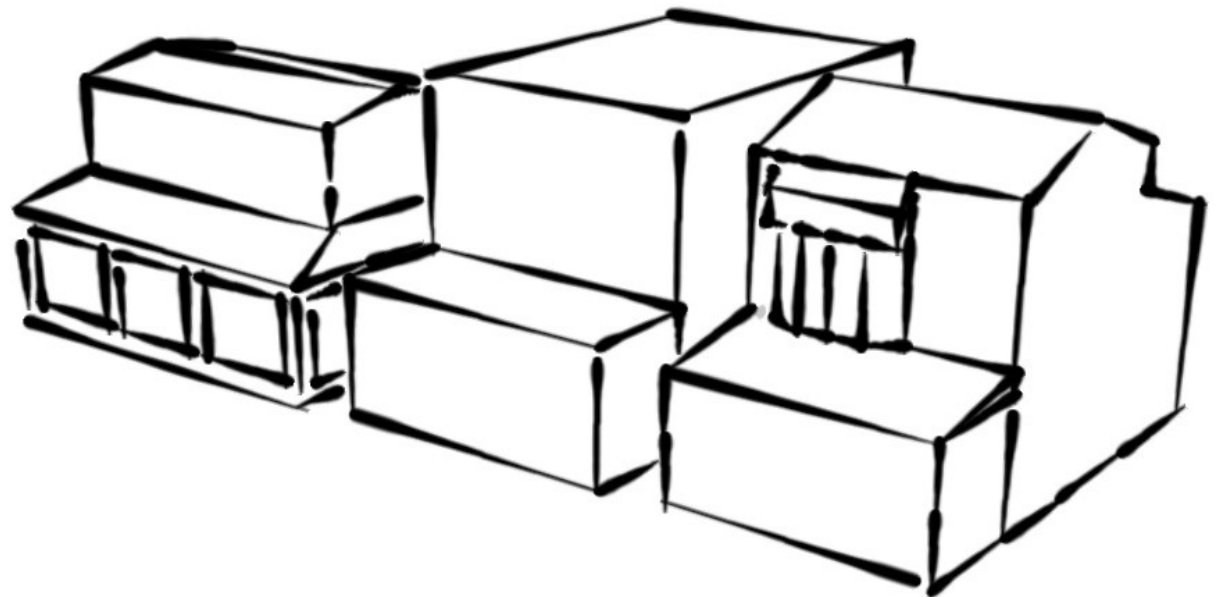
Building Size & Proportions

The overall size and proportions of a new building (massing) can either allow it to blend into the community or make it an unwelcome addition to the neighborhood. Setting limits on the maximum vertical (height) and horizontal (façade length) dimensions of new buildings is an effective way to ensure that new development maintains the established scale of development.

Existing buildings throughout the Main Street study area are generally two to three stories in height. New construction is limited to a maximum allowable height of 35 to 40 feet depending on the zoning district. New buildings need not match the height of neighboring buildings, but they are encouraged to have the same

number of stories. Although a minimum height is not set in either the zoning ordinance or SALDO, single-story buildings are not recommended on Main Street where two to three stories are prevalent.

Another factor in a building's massing is the length of its façades. Longer façades benefit from the addition of bay windows, building extensions and recesses, and changes of material/details at least every 50 feet; no façade of a single-family residential building should exceed 50 feet. Architectural elements, such as cornices and eaves, can also be employed along the roofline to break up the horizontal and vertical planes of the building (more on this under 'Roofs').



Infill development, represented by the boxy building in the middle, should have similar proportions and massing to existing neighboring buildings.

Materials & Colors

Building material and color changes are an effective way to break up the mass of a building and add visual interest. Using similar building materials or colors to neighboring buildings can also connect new buildings into the established block and allow them to blend in more successfully. Stucco and brick are pervasive in the borough and should be considered as options for primary materials.

Uniform, blank walls are not permitted for any façade that either faces or is viewable from a street, a parking area, or other publicly accessible space. A combination of complementary materials, plus windows, should be utilized. The SALDO requires a ‘distinct base’

that is at least one foot in height at the ground level and that is defined either by articulation or through the use of stone, masonry, or decorative concrete; this mimics an exposed foundation. An architectural feature, articulation, or change in material, texture or color is also required no less than every 20 linear feet for nonresidential buildings. The use of masonry, concrete or masonry plinth, belt courses of differing materials/ colors, decorative tile or glass are recommended. The use of vinyl, aluminum, or corrugated metal siding is generally discouraged on Main Street, as these are incongruous with the historic nature of the architecture.

Front Entrances and Storefronts

Main entrances are meant to be attractive and inviting, but what this means in terms of design will vary by use. It is recommended that all residential buildings have a front porch or portico, which are a near-universal feature of homes on Main Street. Nonresidential buildings must have everyday, public entrances on the front façade, facing Main Street; front entrances must be recessed or protruding, and accentuated by a canopy, overhang, portico or porch.

For retail, restaurant, or other commercial or office uses that serve the public, storefront windows are an integral aspect of the front entrance. These large windows allow light to enter the building and encourage passersby to take a look inside. The SALDO requires 50% clear window area on the ground floor for the aforementioned uses; this window area must be between one and eight feet off the ground, as demonstrated by the image to the right. This requirement was based on existing storefronts throughout the Main Street business district.



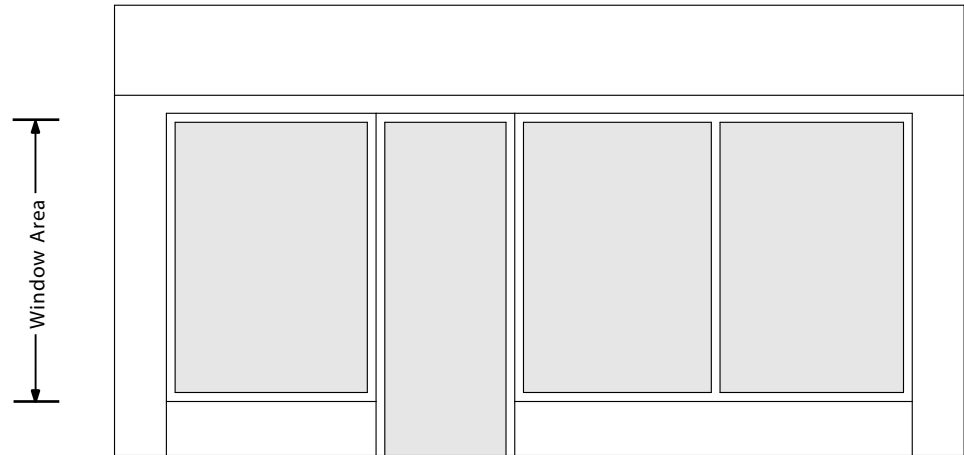
Street-facing facades should be visually interesting, with changes in colors and material. Blank walls should be avoided.

Windows

Windows are an effective way to break up large facades and the pattern of window openings helps to establish the rhythm of a building. In addition to aesthetics, windows have an important function in allowing light and air to enter buildings. Apart from perhaps a first floor, operable windows should be utilized in most cases. The use of clear or lightly tinted glass for windows is encouraged, and the use of smoked, reflective, or black glass as a first floor window is prohibited.

Regular, symmetrical window patterns are commonplace, as demonstrated by the image to the right. Apart from requiring windows on any street-facing façade, residential buildings do not have any specific percentage of windows required. It is therefore encouraged that the pattern of window openings and percentage of window area of buildings to either side be used as a template for new construction.

Nonresidential uses, other than those covered under the storefront requirement, require a minimum of 30% transparent window area on the front façade. Upper stories of all nonresidential buildings must have at least 20% window area.



Although the former Keely House has seen many alterations throughout its long history, the building has retained its original window openings.

Roofs

As noted in the preceding section on existing buildings, the form of a roof is an often overlooked yet important architectural feature. The form of a modern roof often implies the function of the building: pitched roofs are typically used for residential buildings and flat roofs are reserved for nonresidential or mixed-uses.

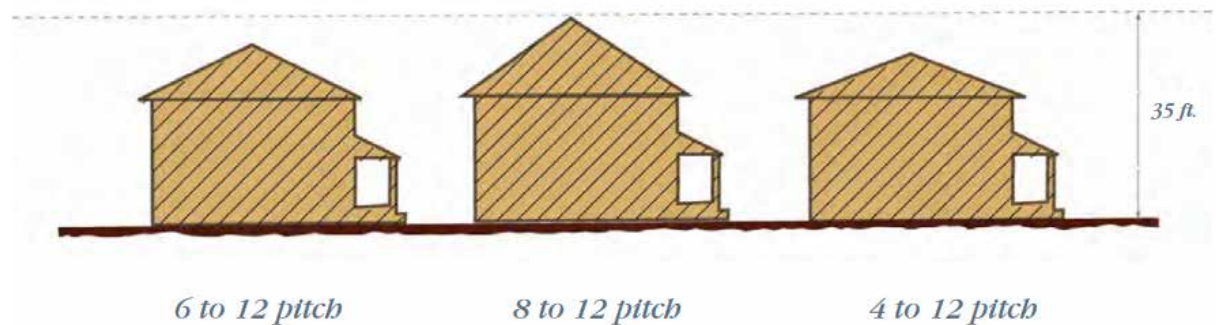
For that reason, residential roofs must be of the same style as those on the block. This generally means that a pitched roof must be built. Flat roofs are not permitted for residential development on a block where none currently exist. Shingle roofs are generally recommended, although there are a handful of metal roofs throughout Main Street.

Nonresidential buildings, on the other hand, are permitted to have flat roofs when a cornice, dormer, cupola, tower, turret, parapet wall, false pitched roof, or other architectural feature is provided. Furthermore, one of following treatments is required at a minimum of every 50 feet along a nonresidential roofline: dormers, projecting cornice, articulated parapet, pitched or mansard roof, terraced roof, green roof, or roof lines with an architectural focal point such as a peak, gable, dome, barrel vault, or roofline trellis. In the case of many commercial buildings on Main Street that were originally built to be residences, pitched roofs would be appropriate for new construction. When pitched roofs are utilized, the pitch must be between 4:12 and 12:12.



Examples of various roof styles found on Main Street

Roof Pitch



Signage and Wayfinding

Signage, whether public or private, serves many important functions and is an essential aspect of the built environment. Public wayfinding signs alerts travelers to the locations of important landmarks throughout the area. Public safety signage, such as the signs along Main Street pointing towards the fire and police Stations, inform the public as to the locations critical to public health and safety. Businesses and institutions use signage to advertise themselves or their products and attract patrons.

The applications of signage are nearly limitless and so too are the design options. Signs constructed of quality material, designed at the pedestrian scale, and connecting to the historic architecture can contribute to a sense of place and economic development. Conversely, without certain controls, signage can become an eyesore that negatively impacts the aesthetic quality of the area, which can ultimately impact property values. In order to avoid the various negative impacts that signage can bring, municipalities such as East Greenville have adopted comprehensive standards to control the overall size, shape, type, location, illumination, and duration of signage.

In East Greenville, the most notable signs are the regional wayfinding signs and commercial business signage. There are opportunities to expand the public signage scheme through the addition of interpretive signs and public art, both of which are explored on the following pages. Business signage is regulated by the

Relevant Regulations & Specifications

Chapter 95, Zoning, Article XIV, Signs



The sign at Borough Hall is a prime example of an externally illuminated, freestanding sign; the text is simple and legible, and graphics are minimal

zoning ordinance in Article XIV, Signs; however certain design guidelines have been included in this section which complement the baseline standards of the ordinance. Not all sign regulations are captured in this section; for a deeper understanding of sign regulations in the borough, please refer to zoning ordinance.

Commercial Signage

Regulations related to the design, size, illumination and location of private signage are specified in Article XIV, Signs, of the zoning ordinance (Chapter 95). In addition to the nonnegotiable minimum standards of the ordinance, there are several overarching recommendations for private signage on Main Street:

- Avoid Oversized Signs. Signs should be scaled according to context. Any building-mounted or integrated signage should not dominate the façade of a building, nor should it detract from or obscure architectural details. Freestanding signs should be only as large as would be necessary to promote the message to passersby.
- Limit the Number of Signs. Too much signage can cause confusion and clutter, so it is recommended that the number of signs on a building and lot be limited. In multi-tenant buildings, the use of a shared signboard or directory is encouraged.
- Coordinate Sign Design. When multiple signs are used, they should be of the same general design and complement one another. Signage is also encouraged to relate to the associated building through the use of complementary colors and materials.



Examples of business signage along Main Street.

- Window and Wall Signs are Preferable. With most nonresidential buildings set fairly close to the sidewalk, window, awning, and wall signs are preferred to freestanding signs. Window signs should generally be limited to no more than 25% of the window area of the ground-level to avoid clutter and avoid obscuring visibility. Wall signs should be closer to a maximum of 10% of the surface area of the ground floor façade, though this will depend on the type and location of signage.
- Limit Illumination. Illumination should be kept to a minimum. The Zoning Ordinance prohibits some forms of sign illumination, such as beacon lighting, but allows for both internal and external illumination in certain circumstances. External illumination is preferable for Main Street, with down lighting being an appropriate way to highlight signboards and up lighting being a way to highlight architectural features. Shaded gooseneck light fixtures are a good choice for wall signs, as these are likely most similar to light fixtures that would have been used when the buildings were initially constructed (roughly the late 1800s through early 1900s).

Regional Wayfinding Signage

The Upper Perkiomen Valley’s regional wayfinding signage program is a resounding success story for multi-municipal place making. The wayfinding signs are situated throughout the region at key locations and they share a uniform design, with brick red accents



Example of a regional wayfinding sign

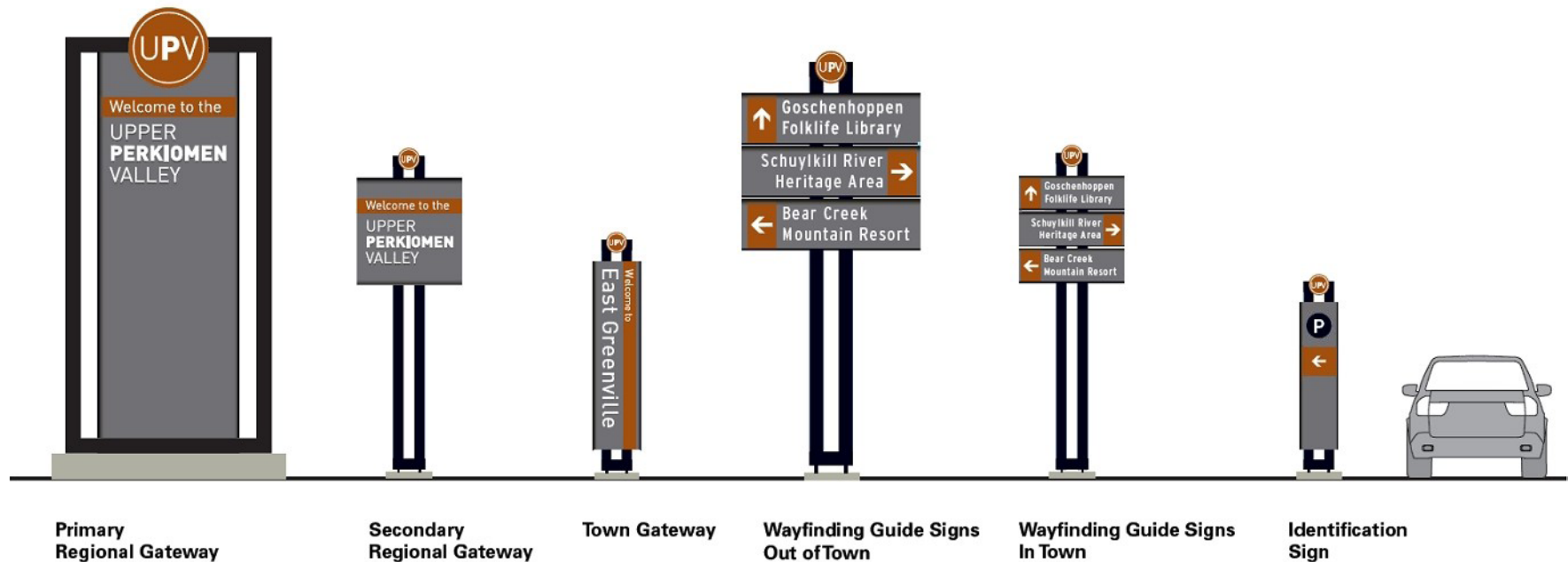
alluding to the region's ubiquitous building material and with exposed steel calling back to the region's industrial heritage. As demonstrated in the image to the bottom right, there are several designs based on the intended purpose.

Large gateway signs welcome travelers to the region at key thoroughfares, and municipal gateway signs greet travelers as they move between the six communities of the region. Directional signs point to the location of key destinations like parks and other governmental, educational, or cultural facilities. Lastly, identification signs draw attention to the location of public parking areas in business districts.

The wayfinding signs are scaled according to purpose and location, with gateway signs being the largest and most eye-catching. Smaller wayfinding signs are located throughout walkable commercial districts, such

as Main Street. Main Street in East Greenville features gateway signs at either end, has eight directional signs pointing to local attractions, and a few identification signs that note the location of public parking areas.

The concept for a regional system of wayfinding signs was conceived in 2012 as an implementation action of the Chamber of Commerce's PerkUp initiative, an economic development strategy for the region. A consultant, CVEDesign, worked with the Montgomery County Planning Commission, Montgomery County Parks, Trails, and Historic Sites, the Upper Perkiomen Valley Chamber of Commerce, the Upper Perkiomen Valley Regional Planning Commission and the municipalities of the region to design the series of signs, plan for their deployment, and install the signs throughout the region.





An interpretive Sign along the Pottstown Riverwalk

Interpretive Signage

The goals of interpretive signs and historical markers are to draw attention to important historical and cultural resources, and to provide information on what makes the site unique and important. Interpretive signs can be simple, providing only a brief description of the site like historical markers, or they can be part of a larger system with several discrete panels that work together to tell a longer story to the reader.

A unified system of interpretive signage could be created on any number of topics, for example: information on historical sites, events, and persons could provide insight into how the borough formed its unique identity, or a series of informational signs could

provide information on ongoing borough priorities like the Shade Tree Commission's efforts related to the urban forest.

Interpretive signs could be modeled on the regional wayfinding signs, or perhaps could be part of a region-wide effort to expand the regional sign program to include these types of signs. Ultimately, it will be up to the borough and the other members of the regional planning commission to decide if the regional signage program should be expanded.

Public Art

Public art can be an effective way to activate potentially underutilized or unattractive spaces on Main Street. Permanent public art would likely include sculptures and murals, while temporary public art exhibitions may come in the form of storefront decoration or be a part of “pop-up” events. Public art was identified as one of the highest scoring options for streetscape design, as noted on page 27, due to the positive impact and catalyzing impact that it can have. Property owners are encouraged to approach the borough with ideas for public art at any time, not only as new development occurs.

Sculptures may be provided within a front yard area, like in the image to the right, or they may be integrated into a public plaza connected to the sidewalk. By their nature, each sculpture will be unique in design; however, any murals that are near the roadway must not be distracting to drivers. Murals are another attractive form of public art, and these require blank walls as a canvas. Because blank walls are discouraged or outright prohibited for new development, depending on the use of the building, existing walls are the most likely locations for murals.

A public art mural should feature themes related to the borough and its history, culture, industry, or identity.

Activating storefronts through the use of public art is another option that the borough intends to explore. Temporary art within a storefront window can be a way to beautify temporarily vacant storefronts while it is between tenants, or it can be a part of a special event. For example, the borough could host a Halloween event where local students submit designs and then the winners get to decorate a storefront for the Halloween parade.

All of these options hinge on a public-private partnership with property owners. Property owners that wish to pursue public art will need to enter into an agreement with the borough that affirms both parties’ consent and agreement on maintenance. It is recommended that if a public art program is pursued in the future that the process for design review be transparent and allow for input from the public.



The large, blank wall contrasts with the otherwise interesting streetscape



This mural concept activates a large, blank wall near the theater. Property owners should contact the borough if they want to explore adding a mural to their building.

Appendix A:

List of Approved Plantings (Chapter 85, Subdivision and Land Development Ordinance, Appendix A)

§85 Appendix A: List of Approved Plants

Note: Any species or cultivar listed below may be used for another purpose other than the Category under which it is listed, provided it receives the recommendation of the Borough Shade Tree Commission.

Street Trees:

Shade or Canopy Trees Suitable Under or Near Power Lines

Maximum height shall not exceed 25.' Trees shall be spaced at least 18' apart.

<i>Amelanchier arborea</i> 'Robin Hill'	'Robin Hill' Juneberry
<i>Amelanchier canadensis</i>	Serviceberry
<i>Carpinus caroliniana</i> 'Native Flame'	'Native Flame' American Hornbeam
<i>Cercis canadensis</i>	Eastern Redbud
<i>Cornus alternifolia</i>	Alternate-Leaf Dogwood
<i>Cornus florida</i>	Flowering Dogwood
<i>Magnolia virginiana</i>	Sweetbay Magnolia
<i>Prunus serrulata</i> "Shirotae"	Mt. Fuji Cherry
<i>Prunus subhirtella</i> "Autumnalis"	Autumn Flowering Cherry
<i>Syringa reticulata</i> "Ivory Silk"	Japanese tree lilac
<i>Syringa reticulata</i> "Summer Snow"	Japanese tree lilac
<i>Zelkova serrata</i> 'City Sprite'	City Sprite Zelkova
<i>Zelkova serrata</i> 'Schmidtlow'	Wireless Zelkova

Note: No other cultivars of *Zelkova serrata* shall be permitted under these conditions.

Street Trees:

Shade or Canopy Trees Suitable Near Paving and Parking Lot Greening (Planting Islands and Planting Strips):

Trees shall be spaced at least 20' apart.

Trees indicated with an asterisk (*) shall be spaced at least 30-40' apart.

<i>Acer saccharum</i> 'Goldspire'	'Goldspire' Sugar Maple
<i>Betula nigra</i>	River Birch
<i>Carpinus betulus</i> 'Columnaris'	Columnar European Hornbeam
<i>Carpinus caroliniana</i>	American Hornbeam
<i>Cercis canadensis</i>	Eastern Redbud
<i>Ginkgo biloba</i> 'Princeton Sentry'	Princeton Sentry Ginkgo
<i>Ginkgo biloba</i> 'Magyar'	Magyar Upright Ginkgo*
Note: No female cultivars of <i>Ginkgo biloba</i> shall be permitted.	
<i>Gleditsia triacanthos</i> "inermis"*	Thornless Honey Locust*
<i>Ilex opaca</i>	American Holly
<i>Nyssa sylvatica</i>	Black Gum
<i>Platanus x acerifolia</i> "bloodgood"	Bloodgood London Plantree*
<i>Quercus alba</i> *	White Oak*
<i>Quercus coccinea</i> *	Scarlet Oak*

*Quercus imbricaria**
Quercus palustris
*Quercus rubra**
Tilia cordata
Taxodium distichum
Zelkova serrata

Shingle Oak*
 Pin Oak
 Red Oak*
 Littleleaf linden
 Bald Cypress
 Zelkova

Shade or Canopy Trees Suitable for Buffers, Screens, and Natural Areas

Minimum mature height: 45' or more. Trees shall be spaced at least 30' apart, and shall be planted in minimum eight foot (8') planting strip.

<i>Acer saccharum</i>	Sugar Maple
<i>Acer rubrum</i> 'October Glory'	October Glory Red Maple
<i>Betula nigra</i>	River Birch
<i>Carya ovata</i>	Shagbark Hickory
<i>Celtis occidentalis</i>	Common Hackberry
<i>Cercidiphyllum japonicum</i>	Katsura
<i>Cladrastis kentukea</i>	American Yellowwood
<i>Fagus grandifolia</i>	American Beech
<i>Ginkgo biloba</i> (male clones only)	Ginkgo (Male Clones Only)
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Thornless Common Honeylocust
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Liriodendron tulipifera</i>	Tulip Tree
<i>Metasequoia glyptostroboides</i>	Dawn Redwood
<i>Ostrya virginiana</i>	American Hophornbeam
<i>Platanus occidentalis</i>	Sycamore
<i>Platanus x acerifolia</i> "bloodgood"	Bloodgood London Planetree
<i>Quercus alba</i>	White Oak
<i>Quercus bicolor</i>	Swamp White Oak
<i>Quercus imbricaria</i>	Shingle Oak
<i>Quercus macrocarpa</i>	Bur Oak
<i>Quercus palustris</i>	Pin Oak
<i>Quercus phellos</i>	Willow Oak
<i>Quercus prinus</i>	Chestnut Oak
<i>Quercus robur</i>	English Oak
<i>Quercus robur</i> f. <i>fastigiata</i>	Fastigate English Oak
<i>Quercus rubra</i>	Northern Red Oak
<i>Styphnolobium japonicum</i>	Chinese Scholar Tree
<i>Taxodium distichum</i>	Common Baldcypress
<i>Tilia americana</i>	American Linden
<i>Tilia cordata</i> 'Chancellor'	Chancellor Littleleaf Linden
<i>Tilia tomentosa</i>	Silver Linden
<i>Ulmus americana</i> 'New Harmony'	New Harmony American Elm
Note: Any other cultivar of <i>Ulmus americana</i> with a demonstrated resistance to Dutch Elm Disease shall be permitted.	
<i>Ulmus parvifolia</i> 'Emer II'	Elmer II ALLEE Lacebark Elm
<i>Zelkova serrata</i> 'Green Vase'	Green Vase Japanese Zelkova

Zelkova serrata 'Village Green

Village Green Japanese Zelkova

Shade or Canopy Tree – Suitable for Property Lines or Buffer Strips

Minimum Mature Height – 30' or more.

<i>Acer rubrum</i> 'October Glory'	October Glory Red Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Aesculus x carnea</i>	Red Horsechestnut
<i>Betula nigra</i>	River Birch
<i>Carpinus betulus</i>	European Hornbeam
<i>Carpinus caroliniana</i>	American Hornbeam
<i>Carya ovata</i>	Shagbark Hickory
<i>Celtis occidentalis</i>	Hackberry
<i>Fagus grandifolia</i>	American Beech
<i>Ginkgo biloba</i> (male clones only)	Ginkgo (Male Clones Only)
<i>Gleditsia triacanthos</i> "inermis"	Thornless Honey Locust
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree
<i>Halesia tetraptera</i>	Carolina Silverbell
<i>Koelreuteria paniculata</i>	Panicled Goldenraintree
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Metasequoia glyptostroboides</i>	Dawn Redwood
<i>Nyssa sylvatica</i>	Black Tupelo
<i>Ostrya virginiana</i>	American Hophornbeam
<i>Oxydendrum arboretum</i>	Sourwood – (in low-pH soil only)
<i>Platanus x acerfolia</i> "bloodgood"	Bloodgood London Plantree
<i>Quercus alba</i>	White Oak
<i>Quercus bicolor</i>	Swamp White Oak
<i>Quercus coccinea</i>	Scarlet Oak
<i>Quercus imbricaria</i>	Shingle Oak
<i>Quercus macrocarpa</i>	Bur Oak
<i>Quercus palustris</i>	Pin Oak
<i>Quercus phellos</i>	Willow Oak
<i>Quercus prinus</i>	Chestnut Oak
<i>Quercus robur</i> 'Fastigiata'	Fastigiata English Oak
<i>Quercus rubra</i>	Northern Red Oak
<i>Quercus velutina</i>	Black Oak
<i>Sassafras albidum</i>	Sassafras
<i>Taxodium distichum</i>	Common Baldcypress
<i>Tilia americana</i>	American Linden
<i>Tilia cordata</i> 'Chancellor'	Chancellor Littleleaf Linden
<i>Tilia tomentosa</i>	Silver Linden
<i>Ulmus americana</i> 'New Harmony'	New Harmony American Elm
Note: Any other cultivar of <i>Ulmus americana</i> with a demonstrated resistance to Dutch Elm Disease shall be permitted.	
<i>Ulmus parvifolia</i> 'Emer II'	Elmer II ALLEE Lacebark Elm
<i>Zelkova serrata</i> 'Green Vase'	Green Vase Japanese Zelkova

Zelkova serrata 'Village Green

Village Green Japanese Zelkova

Ornamental Trees – Suitable Near Overhead Utility Wires, and for Property Line Buffers, Site Element Screening and Parking Lot Greening (Planting Islands and Planting Strips)

Minimum mature height – 15' or more, with maximum height of 25'.

<i>Acer buergerianum</i>	Trident Maple
<i>Acer griseum</i>	Paperbark Maple
<i>Acer triflorum</i>	Three-flower Maple
<i>Acer truncatum</i>	Shantung Maple
<i>Amelanchier canadensis</i>	Serviceberry
<i>Carpinus caroliniana</i>	American Hornbeam
<i>Cercis canadensis</i>	Eastern Redbud
<i>Chionanthus retusus</i>	Chinese Fringe Tree
<i>Cornus alternifolia</i>	Alternate-Leaf Dogwood
<i>Cornus florida</i>	Flowering Dogwood
<i>Cornus kousa</i>	Kousa Dogwood (Cultivars)
<i>Cornus florida x Cornus kousa</i>	Rutger's Dogwood
<i>Cornus mas</i>	Cornelian Cherry Dogwood
<i>Cornus officianalis</i>	Japanese Cornel Dogwood
<i>Cotinus obovatus</i>	American Smoketree
<i>Crataegus crusgalli</i> var. <i>inermis</i>	Thornless cockspur hawthorn
<i>Crataegus laevigata</i> "Superba"	English hawthorn
<i>Crataegus x lavalleyi</i>	Lavalle hawthorn
<i>Crataegus phaenopyrum</i>	Washington hawthorn
<i>Crataegus viridis</i> "Winter King"	Winter king hawthorn
<i>Hamamelis virginiana</i>	Common Witchhazel
<i>Hamamelis mollis</i>	Chinese Hybrid Witchhazel
<i>Magnolia virginiana</i>	Sweetbay Magnolia
<i>Malus "Adirondack"</i>	Adirondack crab apple
<i>Malus "Prairifire"</i>	Prairifire crab apple
<i>Malus "Professor Sprenger"</i>	Professor Sprenger crab apple
<i>Prunus x 'Okame'</i>	'Okame' Cherry
<i>Prunus x 'Yeodensis'</i>	'Yeodensis' Cherry
<i>Prunus sargentii</i> 'Spire'	Columnar Sargent Cherry
<i>Prunus subhirtella</i> var. <i>autumnalis</i>	Higan Cherry
<i>Prunus virginiana</i>	Chokecherry
<i>Prunus virginiana</i> "Schubert"	Canada red chokecherry
<i>Syringa reticulata</i> "Ivory Silk"	Japanese tree lilac
<i>Syringa reticulata</i> "Summer Snow"	Japanese tree lilac

Large Deciduous Shrubs – Suitable for Property Line Buffers Screens

Minimum Mature Height – 15' or more

Key**W = Wet Site Tolerant****D = Dry Site Tolerant**

<i>Aesculus parviflora</i>	Bottlebrush Buckeye
<i>Aronia arbutifolia</i> W	Red Chokeberry
<i>Aronia melanocarpa</i>	Black Chokeberry
<i>Calycanthus floridus</i> W	Common Sweetshrub
<i>Clethra alnifolia</i>	Summersweet Clethra
<i>Cornus racemosa</i> W or D	Gray Dogwood
<i>Cornus sericea</i>	Redosier Dogwood
<i>Corylus americana</i>	American Hazelnut
<i>Diervilla sessilifolia</i>	Southern Bush-honeysuckle
<i>Forsythia</i> 'Meadowlark'	Forsythia
<i>Hamamelis vernalis</i>	Vernal Witchhazel
<i>Hamamelis virginiana</i>	Common Witchhazel
<i>Hydrangea quercifolia</i>	Oaklead Hydrangea
<i>Ilex verticillata</i>	Winterberry
<i>Philadelphus x lemoinei</i> D	Sweet Mockorange
<i>Rhus glabra</i>	Smooth Sumac
<i>Salix caprea</i>	Pussy Willow
<i>Viburnum dentatum</i>	Arrowwood Viburnum
<i>Viburnum farreri</i>	Fragrant Viburnum
<i>Viburnum nudum</i> "Winterthur or Brandywine"	Smooth Witherod
<i>Viburnum prunifolium</i>	Blackhaw Viburnum
<i>Viburnum trilobum</i>	American Cranberrybush Viburnum

Evergreen Shrubs – Suitable for Buffers and Screens

Minimum Mature Height – Four Feet (4') or more

<i>Ilex crenata</i>	Japanese Holly
<i>Ilex glabra</i>	Inkberry (Cultivars)
<i>Juniperus communis</i>	Common Juniper
<i>Juniperus virginiana</i>	Eastern Redcedar
<i>Kalmia angustifolia</i>	Sheep Laurel
<i>Kalmia latifolia</i>	Mountain-laurel
<i>Leucothoe fontanesiana</i>	Fetterbush
<i>Leucothoe racemose</i>	Sweetbells Leucothoe
<i>Pieris floribunda</i>	Mountain Pieris
<i>Prunus laurocerasus</i>	Common Cherry Laurel
<i>Prunus laurocerasus</i> 'Otto Luyken'	'Otto Luyken' Cherry Laurel
<i>Rhododendron sp. (viscosum, vaseyi, etc.)</i>	Rhodoendron and Azalea
<i>Taxus sp.</i>	Yew
<i>Schipkaensis</i>	Skip Laurel
<i>Viburnum rhytidophyllum</i>	Leatherleaf Viburnum

Shrubs – Suitable for Building Foundation, Front Yard Landscaping or Parking Lot Greening (Planting Islands and Planting Strips)

<i>Baccharis halimifolia</i>	Groundsel-tree
<i>Buxus Microphylla</i>	Littleleaf Boxwood (needs winter wind protection)
<i>Clethra alnifolia</i>	Summersweet
<i>Fothergilla gardenia</i>	Dwarf Fothergilla
<i>Forsythia</i> 'Arnold Dwarf'	Arnold Dwarf Forsythia
<i>Hypericum frondosum</i> 'Sunburst'	Sunburst Golden St. Johnswort
<i>Ilex glabra</i>	Inkberry
<i>Itea virginica</i> 'Henry's Garnet or 'Little Henry'	Virginia Sweetspire
<i>Myrica pennsylvanica</i>	Northern Bayberry
<i>Rhus aromatica</i> 'Lo-Grow'	'Low-Grow' Aromatic Sumac
<i>Rosa hybrida</i> 'Ratko'	Double Knockout Rose
<i>Spiraea x bumalda</i> 'Goldflame'	Bumald Spiraea
<i>Viburnum dentatum</i>	Arrowwood Viburnum

Evergreen Trees – Suitable for Property Line Buffers or Screens

Minimum Mature Height – 20' or more

<i>Abies balsamea</i>	Balsam Fir
<i>Abies concolor</i>	White Fir
<i>Chamaecyparis thyoides</i>	Atlantic Whitecedar
<i>Cryptomeria japonica</i>	Japanese Cedar
<i>Cupressocyparis leylandii</i>	Leyland Cypress
<i>Ilex opaca</i>	American Holly
<i>Picea abies</i>	Norway Spruce
<i>Picea glauca</i>	White Spruce
<i>Picea omorika</i>	Siberian Spruce
<i>Pinus strobus</i>	Eastern White Pine
<i>Pinus thunbergii</i>	Japanese Black Pine
<i>Pseudotsuga menziesii</i>	Douglas Fir
<i>Thuja occidentalis</i>	Eastern Arborvitae
<i>Thuja plicata</i>	Giant (Western) Arborvitae
<i>Tsuga Canadensis</i>	Canadian Hemlock

Deciduous and Evergreen Trees and Shrubs, Wildflowers and Grasses - Suitable for Wet Meadows, Edges, and Bioretention Facilities

Trees

<i>Acer rubrum</i>	Red Maple
<i>Amelanchier canadensis</i>	Serviceberry
<i>Betula nigra</i>	River Birch
<i>Carpinus caroliniana</i>	American Hornbeam
<i>Ilex opaca</i>	American Holly
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Magnolia virginiana</i>	Sweetbay Magnolia
<i>Metasequoia glyptostroboides</i>	Dawn Redwood
<i>Nyssa sylvatica</i>	Black Gum
<i>Platanus occidentalis</i>	American Sycamore
<i>Quercus bicolor</i>	Swamp White Oak
<i>Taxodium distichum</i>	Bald Cypress
<i>Thuja occidentalis cv. nigra</i>	Dark American Arborvitae
<i>Tilia Americana</i>	American Linden

Shrubs

<i>Aronia arbutifolia</i>	Red Chokeberry
<i>Aronia melanocarpa</i>	Black Chokeberry
<i>Cephalanthus occidentalis</i>	Buttonbush
<i>Clethra alnifolia</i>	Summersweet
<i>Cornus amomum</i>	Silky Dogwood
<i>Ilex verticillata</i>	Winterberry Holly (Cultivars, male & female grouped)
<i>Myrica cerifera</i>	Southern Bayberry

Note: Southern Bayberry shall not be planted near structures, as the leaves, stems and branches contain flammable aromatic compounds.

<i>Viburnum trilobum</i>	American Cranberrybush
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Wildflowers/Perennials

<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Aster nova-angliae</i>	New England Aster
<i>Aster puniceus</i>	Purple-stemmed Aster
<i>Aster laevis</i>	Smooth Aster
<i>Daucus carota</i>	Queen Anne Lace
<i>Eupatorium fistulosum</i>	Hollow Joe-pye Weed
<i>Eupatorium dubium</i>	Joe-pye Weed
<i>Helenium nudiflorum</i>	Purple-headed Sneezeweed
<i>Hibiscus moscheutos</i>	Swamp Rose Mallow
<i>Impatiens capensis</i>	Orange Jewelweed
<i>Impatiens pallida</i>	Yellow Jewelweed
<i>Iris versicolor</i>	Blue Flag Iris

<i>Lilium canadense</i>	Canada Lily
<i>Lobelia cardinalis</i>	Cardinal Flower
<i>Lobelia siphilitica</i>	Blue Lobelia
<i>Ludwigia alternifolia</i>	Seedbox
<i>Monarda didyma</i>	Beebalm
<i>Penstemon digitalis</i>	Beardtongue
<i>Pycnanthemum virginianum</i>	Mountain Mint
<i>Rudbeckia laciniata</i>	Green-headed Coneflower
<i>Rudbeckia triloba</i>	Black-eyed Susan
<i>Scirpus acutus</i>	Hardstem Bulrush
<i>Senecio aureus</i>	Golden Ragwort
<i>Solidago gigantea</i>	Late Goldenrod
<i>Solidago graminifolia</i>	Lance-leaved Goldenrod
<i>Typha latifolia</i>	Common Cattail
<i>Zizia aurea</i>	Golden Alexander

Grasses

<i>Panicum virgatum</i>	Switchgrass
<i>Sorghastrum nutans</i>	Indian Grass
<i>Tridens flavus</i>	Red Top

Deciduous and Evergreen Trees and Shrubs, Wildflowers and Grasses - Suitable for Dry Meadows, Edges, and Stormwater Detention Basins

Trees

<i>Acer rubrum</i>	Red Maple
<i>Celtis occidentalis</i>	Hackberry
<i>Gleditsia triacanthos inermis</i>	Thornless Honey Locust
<i>Juniperus virginiana</i>	Eastern Red Cedar
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Quercus bicolor</i>	Swamp White Oak
<i>Quercus coccinea</i>	Scarlet Oak
<i>Quercus macrocarpa</i>	Bur Oak
<i>Quercus palustris</i>	Pin Oak
<i>Quercus rubra</i>	Red Oak (Cultivars Recommended)
<i>Sassafras albidum</i>	Sassafras
<i>Thuja occidentalis</i>	Dark American Arborvitae

Shrubs

<i>Comptonia peregrina</i>	Sweetfern
<i>Cornus racemosa</i>	Gray Dogwood
<i>Diervilla sessilifolia</i>	Southern Bush Honeysuckle
<i>Hamamelis virginiana</i>	Common Witchhazel
<i>Myrica pennsylvanica</i>	Northern Bayberry
<i>Rosa Carolina</i>	Pasture Rose

Rhus aromatic
Rhus copallina
Rhus glabra
Rhus typhina
Viburnum lentago

Fragrant Sumac
Shining Sumac
Smooth Sumac
Staghorn Sumac
Nannyberry Viburnum

Wildflowers and Grasses

Andropogon gerardi
Andropogon scoparius
Asclepias tuberosa
Aster pilosus
Aster simplex
Carex sp.
Elymus canadensis
Monarda fistulosa
Panicum virgatum
Pycnanthemum tenuifolium
Rudbeckia hirta
Solidago nemoralis
Solidago speciosa
Sorghastrum nutans
Tridens falvus
Veronicastrum virginicum

Big Bluestem Grass
Little Bluestem Grass
Butterfly Weed
Aster
White Aster
Sedge
Canada Wild Rye
Wild Bergamot
Switchgrass
Slender Mountain Mint
Black-eyed Susan
Old Field Goldenrod
Showy Goldenrod
Indian Grass
Red Top
Culver's Root

Appendix B:

Summary of Past Planning Objectives Related to Main Street

Parks and Open Space Plan (2019)
Objective #7: Improve pedestrian and bicycle connections between Main Street, borough parks, and regional parks and recreation sites. Create trails, bicycle routes, and walking paths that enhance connections between parks and provide opportunities for exercise. Improve active transportation safety.
Revitalization Plan Update (2010)
Continue to Improve and Enhance the Borough's Physical Character
<ul style="list-style-type: none"> • Finish remaining phases of streetscape improvements along Main Street • Improve the streetscape on sides streets off of Main Street • Put in benches and trash receptacles along Main Street • Design pedestrian wayfinding signage that directs pedestrians to downtown businesses and important community features
Continue to Improve Traffic Circulation throughout the Borough
<ul style="list-style-type: none"> • Reduce speed limits at targeted roadways and intersections • Place yield to pedestrian signs at crosswalks along Main Street
Enliven the Downtown Area
<ul style="list-style-type: none"> • Develop marketing strategies that promote the Borough • Encourage property maintenance to retain and attract new commercial activity • Create arts and culture programs and events
Create New and Enhance Existing Park and Open Space Amenities
Establish linkages between downtown and existing parks through signage and pedestrian walkways
Main Street Study (2016)
#1 Complete streetscaping improvements (striping of on-street parking, street lights, street trees, brick pavers, etc.) from Fourth Street, west to the Borough line.
#2 Ensure proper maintenance (tree pruning, street sweeping, etc.) of streetscape improvements. Work with property owners to plant additional street trees or replace dead or damaged street trees, as needed.
#3 Encourage private greening of the sidewalk area and use of wide side-walks for pedestrian amenities such as outdoor dining. Establish outdoor dining standards in the zoning ordinance.
#4 Add attractive trash and recycling receptacles in strategic locations along Main Street to deter littering.
#7 Install wayfinding signage identifying public parking locations
#13 Work with PennDOT, the Chamber and neighboring communities to coordinate physical improvements to Main Street (State Route 29) to make it safer for pedestrians. Examples of improvements include signalized pedestrian crossings, speed limit reductions, and additional signage.
#15 Establish a recognition program for community greening and façade/signage improvements to encourage property owners to maintain and improve their properties.
#20 Create general design guidelines for storefronts and signage with suggested paint colors, materials, and resources based on an analysis of the Historic Resource Inventory.
#21 Establish a grant or low-interest loan program for façade improvements. Eligible projects must follow the design guidelines established.
#22 Designate individual historic landmarks, if desired by property owners. Explore the creation of a historic district for Main Street if there is interest
#25 Update the street pole banner design regularly and continue seasonal streetscape enhancements such as holiday lighting.
All studies are available upon request at Borough Hall

Appendix C:

New Tree Planting (International Society of Arboriculture)

New Tree Planting

Information on proper practices for planting a tree with a nine-step approach to successful planting and establishment.



Purchasing a tree is an investment, and how well that investment grows depends on the type of tree selected, the location, and the care provided.

When to Plant

- Ideally during the dormant season—in the fall after leaf drop or in early spring before bud break.
- Weather conditions are cool and allow plants to establish roots in the new location before spring rains and summer heat stimulate new top growth.
- Healthy balled and burlapped or container trees can be planted throughout the growing season.
- In tropical and subtropical climates where trees grow year round, any time is a good time to plant a tree, provided that sufficient water is available.

Planting Stress

Balled-and-burlapped trees lose a significant portion of their root system when dug at the nursery. As a result, trees commonly exhibit what is known as “transplant shock.” Transplant shock is a state of slowed growth and reduced vitality following transplanting.

Container trees may also experience transplant shock, particularly if they have circling (girdling) or kinked roots that must be cut. Proper site preparation, careful handling to prevent further root damage, and good follow-up care reduces transplant shock and promotes faster recovery.



Steps to Plant a Tree

Note: Before you begin planting your tree, be sure you have located all underground utilities prior to digging. **811 is the national call-before-you-dig phone number.** Anyone who plans to dig should call 811 or go to their state 811 center's website.

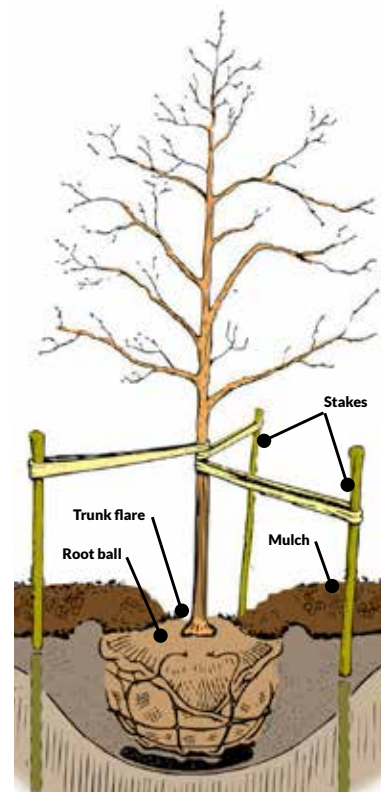
Carefully follow these nine steps to help your tree establish quickly in its new location:

1. The trunk flare is where the trunk expands at the base of the tree. **Ensure trunk flare is partially visible after the tree is planted.** Remove excess soil prior to planting if flare is not visible.
2. Dig a shallow, broad planting hole. **Holes should be 2–3 times wider than the root ball,** but only as deep as the root ball.
3. If wrapped, remove any cover from around the root ball and trunk to facilitate root growth. Remove wire basket or cut one or two rings off so it is low-profile and will not interfere with future root growth. Inspect tree root ball for circling roots and straighten, cut, or remove them. Expose the trunk flare if necessary.
4. Place the tree at the proper height. When placing the tree in the hole, lift by the root ball, not the trunk. The majority of tree's roots develop in the top 12 inches (30 cm) of soil. Planting too deep can be harmful to the tree.
5. Straighten the tree in the hole. Before filling the hole, have someone examine the tree from several angles to confirm it is straight.
6. Fill the hole gently but firmly. Pack soil around the base of the root ball to stabilize it. Fill the hole firmly to eliminate air pockets. Further reduce air pockets by watering periodically while backfilling. Avoid fertilizing at the time of planting.
7. If staking is necessary, three stakes or underground systems provide optimum support. **Studies have shown that trees develop stronger trunks and roots if they are not staked;** however, it may be required when planting bare root stock or on windy sites. Remove stakes after first year of growth.

8. Mulch the base of the tree. Place a 2–3 inch (5–7.5 cm) layer of mulch, but be sure not to pile much right against the trunk. **A mulch-free area of 1–2 inches (2.5–5 cm) wide at the base of the tree will reduce moist bark and prevent decay.**
9. Provide follow-up care. Keep the soil moist by watering at least once a week, barring rain, and more frequently during hot, windy weather. Continue until mid-fall, tapering off as lower temperatures require less-frequent watering.

Other follow-up care to consider:

- Minor pruning of branches damaged during the planting process may be required.
- Prune sparingly after planting. Delay corrective pruning until a full season of growth.
- If trunk wrapping is necessary, use biodegradable materials and wrap from the bottom.



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Finding an Arborist

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Appendix D:

Pruning Young Trees (International Society of Arboriculture)

Pruning Young Trees

Proper pruning is essential in developing a tree with a strong structure and desirable form. Trees that receive the appropriate pruning measures while they are young will require less corrective pruning as they mature.



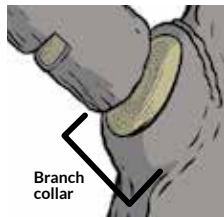
Key Points for Pruning Young Trees

- Set an objective for why the tree will be pruned. For younger trees, the objective is to improve tree structure so the tree will be strong and not interfere with its surroundings as it matures.
- Each cut has the potential to alter the growth of the tree.

- Poor pruning can cause life long damage for the tree. When a tree is damaged it must grow over the damage and the wound is contained within the tree forever.

Deciding Where to Cut

- Pruning cut location is critical to a tree's growth and wound closure response.
- Make pruning cuts just outside the branch collar (see figure below) to avoid damaging the trunk.
- When a long branch needs to be shortened, prune it back to a secondary branch or bud.



- Cuts made between buds or branches may lead to stem decay, sprout production and misdirected growth.

Pruning Tools

- Small branches can be cut with hand pruners.
- Scissor-type or bypass-blade hand pruners are preferred over the anvil type because they make cleaner, more-accurate cuts.
- Cuts larger than one-half inch (1.27 cm) in diameter should be made with lopping shears or a pruning saw.
- Hedge shears should be used on hedges only.
- Ensure tools are kept clean and sharp.

Newly Planted Trees

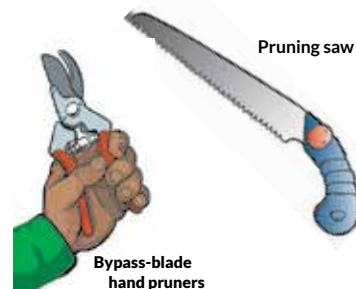
Limit pruning of newly planted trees to the removal of dead or broken branches. All other pruning should be withheld until the second or third year, when a tree has recovered from the stress of transplanting.

Wound Dressings

Research has shown that wound dressings do not reduce decay or speed up wound closure and rarely prevent insect or disease infestations. Most experts recommend not using wound dressings.



Lopping shears



Pruning saw

Bypass-blade hand pruners

Permanent Branch Selection

- As young trees grow, most of the branches present at planting will be pruned away to provide clearance for mowing, pedestrians and/or vehicle traffic.
- The height of the lowest permanent branch is determined by the tree's intended function and location in the landscape. The road side of a street tree may be raised to 16 feet (5 m) to accommodate traffic. In most other situations, 8 feet (2.5 m) of clearance is sufficient. Trees used as screens or windbreaks, however, usually branch low to the ground.
- Sufficient branch spacing and balance, both vertically and radially, is important. The space between permanent branches should be approximately 3% of the tree's eventual height (for example, 1.5 feet [0.5 m] for a tree that can grow to be 50 feet [15 m] tall).
- The strength of branch structure depends on the relative size of the branches and branch angles. Branches similar in diameter to the trunk or limb from which they arise are more prone to failure than those smaller in diameter.
- Narrow angles of attachment can enclose bark within a branch union. Such growth is called included bark, a condition that weakens the branch attachment and may lead to failure when the tree matures. Branches with weak attachments should be pruned when small. Balance should be considered by retaining some branches in each direction radially, spreading from the center outward (see figure top right). Make sure one scaffold branch is not allowed to grow directly above another.
- When pruning, be sure not to remove too many branches. Leaves and supporting branches are major sites of food production and storage. Eliminating too much canopy can "starve" the tree, reduce growth, and increase stress.

Establishing a Strong Scaffold Structure

- "Scaffold branches" are a mature tree's framework. Well trained young trees will develop a strong structure that requires less corrective pruning as they mature.
- The goal is to establish a strong, central trunk with sturdy, well-spaced branches. This form mimics tree growth in forests where outward branching is limited by neighboring trees.
- Some tree species develop some or all of these attributes naturally. Others may require more frequent attention.

Trunk Development

- Most young trees maintain a single dominant, upward-growing trunk, called a "leader".
- Do not prune back the tip of this leader or allow secondary branches to grow taller than the main leader.
- Sometimes, a tree will develop two or more nearly equal size leaders known as codominant stems. Codominant stems can lead to structural weaknesses, so it is best to remove or shorten all but one of the stems when young.
- A tree's secondary branches contribute to the development of a sturdy, well-tapered trunk.

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Good structure

Poor structure



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Appendix E:

Pruning Mature Trees (International Society of Arboriculture).

Pruning Mature Trees

Understand the pruning needs of mature trees and the proper pruning techniques for their care.



Pruning is the most common tree maintenance procedure. Although forest trees grow well with only nature's pruning, landscape trees require a higher level of care to maintain their structural integrity and aesthetics. Pruning must be done with an understanding of tree biology because improper pruning can create lasting damage or shorten the tree's life.

Reasons for Pruning

Because each cut has the potential to change the growth of the tree, no branch should be removed without a reason. Common reasons include:

- Removing dead branches, improving form, and to reduce risk.
- To increase light and air penetration to the inside of the tree's crown or to the landscape below.
- Generally, mature trees are pruned as corrective or preventive measures.

Routine thinning does not necessarily improve the health of a tree. Trees produce a dense crown of leaves to manufacture the sugar used as energy for growth and development. Removal of foliage through pruning can reduce growth and stored energy reserves. Heavy pruning can be a significant health stress for the tree.

There are many outside considerations that make it necessary to prune trees such as: safety, clearance, and compatibility with other components of a landscape.

Proper pruning, with an understanding of tree biology, can maintain good tree health and structure while enhancing the aesthetic and economic values of our landscapes.



When to Prune

Most light, routine pruning to remove weak, dead, or diseased limbs can be accomplished at any time during the year with little effect on the tree.

As a rule, growth and wound closure are maximized if pruning takes place before the spring growth flush. Some trees, such as maples and birches, tend to "bleed" if pruned early in the spring. It may be unsightly, but it is of little consequence to the tree.

Heavy pruning of live tissue just after the spring growth flush should be avoided, especially on weak trees. At that time, trees have just expended a great deal of energy to produce foliage and early shoot growth. Removal of a large percentage of foliage at that time can stress the tree.

A few tree diseases, such as oak wilt, can be spread through pruning wounds and provide access to pathogens (disease-causing agents). Susceptible trees should not be pruned during active transmission periods.

How Much Should Be Pruned?

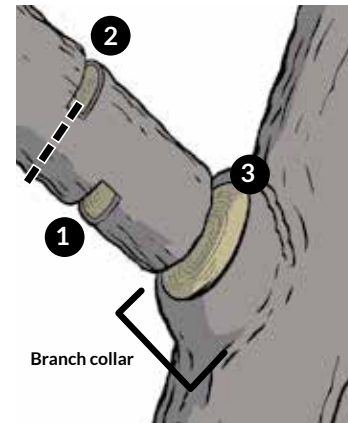
The amount of live tissue that should be removed depends on the tree's size, species, age, and pruning objectives. Younger trees tolerate the removal of a higher percentage of living tissue better than mature trees. Generally, no more than 25% of the crown should be removed at once, and less for mature trees.

Removal of a single, large-diameter limb can create a wound that may not be able to close. Care should be taken to meet pruning objectives.

Making Proper Pruning Cuts

A correct pruning cut removes the branch just outside of the collar. Do not make cuts flush to the trunk. Trunk tissues above and below a flush cut branch often die, creating dead spots.

If a collar has grown out on a dead limb, make the cut just beyond the collar. Do not cut the collar.



(See figure above.) If a large limb is to be removed, its weight should first be reduced as follows:

1. Make an undercut about 12–18 inches (30–46 cm) from the limb's point of attachment.
2. Make a second cut from the top, directly above or a few inches farther out on the limb. Doing so removes the limb, leaving a stub.
3. Remove the stub by cutting back to the branch collar. This technique reduces the possibility of tearing the bark.

Pruning Techniques

Cleaning is the removal of dead, dying, diseased, weakly attached, and low-vigor branches from the crown of a tree.

Raising removes the lower branches from a tree to provide clearance for buildings, vehicles, pedestrians, and vistas.

Reduction reduces the size of a tree, often for utility line clearance. Reducing a tree's height or spread is best accomplished by pruning back the leaders and branch terminals to secondary branches that are large enough to assume the terminal roles (at least one-third the diameter of the cut stem). Compared to topping (See "Why Topping Hurts Trees" brochure), reduction helps maintain the tree's form and structural integrity.

Reducing density of foliage at the crown periphery (previously called thinning) is sometimes performed to increase wind or light penetration for aesthetic reasons and to promote interior foliage development.

Wound Dressings

Research has shown that wound dressings do not reduce decay or speed up wound closure and rarely prevent insect or disease infestations. Most experts recommend not using wound dressings.

Hiring an Arborist

Pruning large trees can be dangerous. Pruning that involves working above the ground or using power equipment should be done by an ISA Certified Arborist®. These arborists can determine the type of pruning necessary to improve the overall health of the tree and provide the services of a trained crew with the required safety equipment and liability insurance.

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