NEWINGTON STATION

TRANSIT VILLAGE DESIGN DISTRICT

TRANSIT-READY FORM-BASED CODE

Town of Newington, Connecticut

TRANSIT VILLAGE DESIGN DISTRICT
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INTRODUCTION

1. Purpose and Initial Requirements:

A Hartford Line train station in Newington south of Cedar Street creates the potential for transformational development in the areas near the train station. That development should inspire a Transit Village, unique in design for Newington, but still consistent with the overall character of the community.

This Transit Village Design District code applies to approximately forty-four acres south of Cedar Street and approximately twenty acres north of Cedar Street as delineated in the map at Appendix D. This development method is optional and overlays the existing zones and regulations contained in the Town of Newington Zoning Districts map, the Town of Newington Zoning Regulations and the Town of Newington Subdivision Regulations.

Entities seeking to use this code must meet all the following conditions:

a. The applicant must control the development rights for either the entire approximately forty-four acres south of Cedar Street (TVDD South Neighborhood) or the approximately twenty acres north of Cedar Street (TVDD North Neighborhood) or both. Control can be by ownership, option, one hundred year ground lease or other means that will assure the Town Plan and Zoning Commission that approvals provided to the applicant will be implemented throughout a Neighborhood.

b. To develop the property as a TVDD, the applicant must submit a master plan for the entire Neighborhood that will ensure development of individual parcels will tie together in a cohesive, consistent manner. Master plans must show the locations of streets, infrastructure, expected lots and buildings and their use types, parking and Civic Zones.

c. The applicant must agree to demolish all the existing structures in the Neighborhood, which is necessary to ensure that all development will be new and in keeping with the master plan.

d. The applicant must agree that all streets, infrastructure and parking within a Neighborhood will be privately owned, with the applicant or other acceptable private entity responsible for the construction, maintenance and replacement of same.

Full Development of an entire Neighborhood is not required on a single site plan. Once approval of a Neighborhood master plan is granted, site plan applications for development of individual lots and buildings can proceed at any time and any schedule, provided that individual site plans are in conformance with the Neighborhood master plan and these regulations. Similarly, streets, infrastructure, parking and other appurtenances may be built out when the master plan is approved but are not required to be. Rather, streets, infrastructure, parking and other appurtenances may be constructed in connection with the lots and buildings they will serve.

2. The Structure of the Transit Village Design District Code:

2.3. Chapter 1 (**Instructions)** contains the general instructions pertaining to all other Chapters.

2.4. Chapter 2 (**Neighborhood Plans)** provides the master planning requirements for two types of Neighborhood suitable for the North or South parcels, including the Mixed (MX) Zones that make up each type. Master planning includes Thoroughfares and Civic Zones in areas for future development under this Code.

2.5. Chapter 3 (Lot and Building Plans) provides private site standards within each MX Zone. This is essentially the zoning code for the areas that have been mapped with MX Zones after master planning.

2.6. Chapter 4 (Tables) contains the table for the Intent and Purpose of the Code, and tables for the elements required for Neighborhoods, such as the measurements and types allowed for each MX Zone. The Table numbers refer to the Chapter to which they apply. For example, "Table 3B" applies to certain standards in Chapter 3.

2.7. Chapter 5 (Definitions) contains terms and definitions supporting the other Chapters, with a page of Definitions Illustrated.

In the master planning process, supplementary modules and their associated definitions may be consulted as needed. Modules provided include: Thoroughfare Assemblies, Bicycling, Sustainable Commerce, Light Imprint Matrix for stormwater and landscaping systems, Shading of Glazing, Surface-to-Volume Ratios, and more.

3. Overview of the Transit Village Design District Code:

3.3. Transit Village Design District Zones:

The Transit Village has two integrated zones that differ in character, and a Civic Zone that conforms to or adorns those contexts. The MX-1 Zone is primarily residential with some lower intensity retail and office uses, and the MX-2 is higher density and has more mixed use. The MX-2 Zone is intended to be adjacent to the rail station itself, while the MX-1 Zones are within walking distance to the station and the higher variety of uses. A more detailed version of the following descriptions can be found on Table 1A, as part of the Intent and Purpose section of Chapter 1.

- **MX-1 (Mixed Use 1) Zone** consists of a wide range of building types and medium density. Setbacks and landscaping are variable. Streets have curbs and sidewalks. Greens, pocket parks, and dog parks are appropriate here.
- **MX-2 (Mixed Use 2) Zone** consists of higher density mixed use buildings that accommodate retail, offices, civic uses and apartments. It has a tighter network of streets, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks. MX-2 is the heart of the Transit Village Design District, adjacent to Newington Station and Cedar Street.

- **Civic Zone** consists of Civic Buildings and/or Civic Spaces appropriate to their MX Zones. Civic Spaces include greens, squares, pocket parks, playgrounds, dog parks, and plazas.

4. Responsibilities for Implementation:

The Transit Village Design District Code requires the preparation of Plans at the Neighborhood scale that will then guide the Plans for the private sites.

- **Neighborhood Plans** for new Neighborhoods, including new and existing thoroughfares and civic spaces. Prepared on behalf of the land owner, the developer, or the Town Plan and Zoning Commission.
- **Lot & Building Plans** for individual lots. Prepared by or on behalf of a builder or the property owner. This is essentially the zoning code for the adopted Neighborhood Plans.

CHAPTER 1. GENERAL INSTRUCTIONS

1.1 AUTHORITY

1.1.1 The action of the Newington, Connecticut Town Plan and Zoning Commission in the adoption of this Code is authorized under the General Statutes of the State of Connecticut and the Town Charter, Section X and local ordinance, and Title 30-A, Chapter 187, § 4301 forward. Chapter 2 is authorized as the subdivision standards for Neighborhood Plans in lands regulated by this Code under Subchapter 4, §§ 4401-4407 and the Newington Subdivision Regulations.

1.1.2 This Code was adopted as one of the instruments of implementation of the public purposes and objectives of the 2010-2020 Plan of Conservation and Development adopted pursuant to Section 8-23 of the Connecticut General Statutes.

1.1.3 This Code was adopted to promote and to protect the public health, safety, and welfare of the inhabitants of the Town of Newington, Connecticut and of the public generally, including protection of the environment, conservation of land, energy and natural resources, reduction in vehicular traffic congestion, more efficient use of public funds, health benefits of a pedestrian environment, education and recreation, reduction in sprawl development, and improvement of the built environment.

1.2 APPLICABILITY

1.2.1 PROVISIONS OF THIS CODE ARE ACTIVATED BY "SHALL" WHEN REQUIRED; "SHOULD" WHEN RECOMMENDED; AND "MAY" WHEN OPTIONAL.

1.2.2 The provisions of this Code, when in conflict, shall take precedence over those of other codes, ordinances, regulations and standards except the State Building and Energy Code.

1.2.3 The existing Town of Newington subdivision and zoning regulations ("Existing Local Codes") shall continue to be applicable to issues not covered by this Code except where the Existing Local Codes would be in conflict with Section 1.3 (Intent and Purpose) of this Code.

1.2.4 Chapter 5 (Definitions) contains regulatory language that is integral to this Code. Those terms not defined in Chapter 5 shall be accorded their commonly accepted meanings. In the event of conflicts between these definitions and those of the Existing Local Codes, those of this Code shall take precedence.

1.2.5 The metrics of the text standards and tables are an integral part of this Code. However, the diagrams and illustrations that accompany them should be considered guidelines.

1.2.6 The Appendices are regulatory. They provide options within each MX Zone, that when selected become regulatory.

1.2.7 Where in conflict, numerical metrics shall take precedence over graphic metrics.

1.3 INTENT AND PURPOSE

THE INTENT AND PURPOSE OF THIS CODE IS TO ENABLE, ENCOURAGE AND QUALIFY THE IMPLEMENTATION OF THE FOLLOWING POLICIES:

1.3.1 THE TOWN OF NEWINGTON

a. That the area should retain its natural infrastructure and visual character derived from topography, woodlands, farmlands, and riparian corridors.
b. That growth strategies should encourage infill, redevelopment, and retrofit to the extent possible.
c. That new development should be organized in the pattern of complete neighborhoods and/or villages to encourage walking and bicycling and to preserve open lands.
d. That workforce housing should be distributed throughout the area to match job opportunities.
e. That transportation corridors should be planned and reserved in coordination with land use.
f. That green corridors should be used to define and connect the developed areas.
g. That the area should include a framework of transit, pedestrian, and bicycle systems that provide alternatives to the automobile.

1.3.2 NEWINGTON NEIGHBORHOODS

a. That neighborhoods should be compact, pedestrian-oriented and mixed use.
b. That complete neighborhoods should be the preferred pattern of development, and that districts specializing in a single use should be the exception.
c. That ordinary activities of daily living should occur within walking distance of most dwellings, allowing independence to those who do not drive.
d. That interconnected networks of thoroughfares should be designed to disperse traffic and reduce the length of automobile trips.
e. That within neighborhoods, a range of housing types and price levels should be provided to accommodate diverse ages and incomes.
f. That appropriate building densities and land uses should be provided within walking distance of transit stops.
g. That civic, institutional, and commercial activity should be embedded in neighborhoods, not isolated in remote single-use complexes.
h. That a range of open space including parks, squares, playgrounds and/or community gardens should be distributed within neighborhoods.

1.3.3 THE BLOCK AND THE BUILDING

a. That buildings and landscaping should contribute to the physical definition of thoroughfares as civic places.

b. That development should adequately accommodate automobiles while respecting the pedestrian and the spatial form of public areas.

c. That the design of streets and buildings should reinforce safe environments, but not at the expense of accessibility.

d. That architecture and landscape design should grow from local climate, topography, history, and building practice.

e. That buildings should provide their inhabitants with a clear sense of geography and climate through energy efficient methods.

f. That civic buildings and public gathering places should be provided as locations that reinforce community identity and support self-government.

g. That civic buildings should be distinctive and appropriate.

h. That the harmonious and orderly evolution of developed areas should be secured by the use of this Code and its successional elements.

1.3.4 MIXED (MX) ZONES

a. That neighborhoods should provide meaningful choices in living arrangements as manifested by distinct physical environments.

b. That the Mixed (MX) Zone descriptions on Table 1A (Intent and Purpose) shall constitute the Intent and Purpose of this Code with regard to the general character of each of these environments.

1.3.5 CIVIC ZONES

a. That neighborhoods should contain area dedicated for public use.

1.4 PROCESS

1.4.1 The Town of Newington hereby creates a Design Review Committee (DRC), consisting of the Town Planner, architects, designers, landscape architects, engineers, contractors and other experts to advise the Town Plan and Zoning Commission (TPZ) on both Neighborhood Plans (see Chapter 2) and Lot and Building Plans (see Chapter 3). The TPZ shall determine the schedule for advisory plan review.

a. The DRC shall review all horizontal and vertical elements of each plan for form, function and aesthetics.

b. The DRC shall review all ancillary components of each plan, including but not limited to bumper guards, bollards, guard rails, traffic medians and islands, security features, loading doors, dock bumpers, service doors, benches, and waste receptacles.

1.4.2 Master Planners shall follow the regulations of Chapter 2 (Neighborhood Plans) to propose the precise locations of the Mixed (MX) Zones and their associated thoroughfares and Civic Zones.

1.4.3 The standards for the MX Zones have been determined through a process of public consultation, as set forth in Table 1A (Intent and Purpose), and in Chapter 3 (Lot and Building Plans).

1.4.4 Should a violation of an approved Lot and Building Plan occur during construction, or should any construction, site work, or development be commenced without an approved Lot and Building Plan, the Code Enforcement Officer has the right to require the owner to stop, remove, and/or mitigate the violation.

1.5 SPECIAL PERMITS

1.5.1 Elements that deviate from the specific requirements of this Code, or are considered Secondary Uses, are available for Special Permits. These elements are marked as such in this Code and shall be processed by the Town Plan and Zoning Commission.

1.5.2 A Special Permit may be granted according to Section 5.2 of the Town of Newington Zoning Regulations for "Procedures and Standards for All Special Permits."

1.6 INCENTIVES

1.6.1 The TPZ may grant the following incentives to achieve the goals of this Code:

- **a.** The municipality may increase density by the Transfer of Development Rights to achieve more civic space.
- **b.** The municipality may increase density for projects containing Affordable Housing.
- **c.** The municipality may reduce parking requirements for Affordable Housing units.

CHAPTER 2. NEIGHBORHOOD PLANS

2.1 INSTRUCTIONS

2.1.1 Chapter 2 applies to the delineation of MX and Civic zones and the allocation of all public areas including thoroughfares. An applicant must have control over all parcels within either TVDD North or TVDD South, or both.

2.1.2 Neighborhood Plans may be prepared by an owner or by the Town Plan and Zoning Commission.

2.1.3 Neighborhood Plans shall include maps showing the following, in compliance with the provisions of Chapter 2:

- **a.** Regulating Plan (zoning map) showing MX Zones, Civic Zones, Thoroughfare network, and Special Requirements.
- **b.** Public Utilities, including locations of hydrants. All public utilities shall be underground.
- **c.** Stormwater Management plan, using appropriate Light Imprint techniques in Appendix C.
- **d.** Permanent streetscape amenities in the Public Frontage.
- **e.** Requests for Special Permits, if any.

2.1.4 Neighborhood Plans shall meet the requirements for each MX Zone, as provided by Table 2A (Standards for Neighborhood Plans) and any supporting documents, plans, fees, and notification requirements required to address Section 5.2 of the Zoning Regulations that are not superseded by this Code.

2.1.5 Once the Town Plan and Zoning Commission approves a Neighborhood Plan, the Transit Village Design District Code shall be the exclusive and mandatory zoning regulation for that area, and the provisions of this Code shall be applied in their entirety.

2.2 SEQUENCE OF NEIGHBORHOOD DESIGN

2.2.1 The site shall be structured using Mixed Use (MX) Zones applicable to the Neighborhood type as required in Section 2.3. Neighborhoods should be designed according to existing conditions, such as traffic intersections, adjacent development, transit stops, and natural features.

2.2.2 Areas of MX Zones shall be allocated within the boundaries of each Neighborhood according to Section 2.3 and Table 2A (Standards for Neighborhood Plans).

2.2.3 Civic Zones shall be assigned according to Section 2.7. Permitted types of civic space are listed on Table 2F.

2.2.4 The thoroughfare network shall be laid out according to Section 2.6 and Table 2B, Table 2C, Table 2D, and/or Table 2E, or Appendix A (Thoroughfare Assemblies). Permitted maximum block sizes are listed on Table 2A.

2.2.5 Density shall be calculated according to Section 2.8 and Table 2A (Standards for Neighborhood Plans).

2.3 TRANSIT VILLAGE NEIGHBORHOOD TYPES

2.3.1 NORTH NEIGHBORHOOD

- **a.** The North Neighborhood is located north of Cedar Street and shall be planned as a whole, approximately 20 acres. For smaller sites, see Section 2.5 (Participating Parcels).

b. The North Neighborhood shall include primarily the MX-1 Zone and a smaller amount of the MX-2 Zone as allocated on Table 2A (Standards for Neighborhood Plans).

2.3.2 SOUTH NEIGHBORHOOD

a. The South Neighborhood is located south of Cedar Street and shall be shall be planned as a whole, approximately 44 acres.

b. The South Neighborhood shall include both the MX-1 Zone and MX-2 Zone as allocated on Table 2A (Standards for Neighborhood Plans).

2.4 MIXED USE (MX) ZONES

2.4.1 MX Zones shall be assigned and mapped on each Neighborhood Plan according to the percentages allocated on Table 2A (Standards for Neighborhood Plans).

2.4.2 A MX Zone may include any of the elements indicated for its zone number throughout this Code, in accordance with Intent and Purpose described in Table 1A and the metric standards on Table 3F and Table 3G.

2.5 PARTICIPATING PARCELS

2.5.1 The owner of a parcel at least 4 acres but smaller than a full Neighborhood may submit a Participating Parcel Plan and may request the allocation of one or more MX Zones based on (1) the location of the parcel and (2) the permitted allocation percentages within the requested Neighborhood.

2.5.2 Participating Parcel Plans follow the same process as a Neighborhood Plan.

2.5.3 Upon approval by the TPZ, the assigned MX Zones for the Participating Parcel(s) shall be recorded on the official Regulating Plan. Subsequent applications for Participating Parcels or Neighborhood Plans shall complement, in their allocation calculations, the MX Zones of the already recorded Participating Parcels.

2.6 THOROUGHFARE STANDARDS

2.6.1 Thoroughfares are intended for use by vehicular, bicycle, and pedestrian traffic and to provide access to lots and Civic Spaces. Thoroughfares shall generally consist of Vehicular Lanes and Public Frontages. Permitted thoroughfare types for each MX Zone are listed on Table 2B, Table 2C and Appendix A.

2.6.2 Thoroughfares and Civic Spaces shall be designed in context with the physical form of their MX Zones. Thoroughfares shall be designed for the design speed of the MX Zones through which they pass. The Public Frontages of thoroughfares that pass from one MX Zone to another should be adjusted accordingly. See Table 2D and Table 2E.

2.6.3 Within the MX-1 and MX-2 Zones, pedestrian comfort shall be a primary consideration of the thoroughfare. Design conflict between vehicular and pedestrian movement generally shall be decided in favor of the pedestrian.

2.6.4 All new thoroughfares shall terminate at other thoroughfares, forming a network. Cul-de-sacs, dead-ends, and hammerheads shall be subject to approval by Special Permit to accommodate specific site conditions only. Such conditions are limited to impassable or uncrossable hillsides, utilities, or existing infrastructure that block the connection to another vehicular thoroughfare. Vehicular thoroughfares that cannot connect by virtue of the aforementioned site conditions shall be connected to another vehicular thoroughfare by a bikeway, path, or trail. Easements shall be provided for this purpose.

2.6.5 Each lot shall enfront a vehicular thoroughfare or Civic Space, except that 20% of the lots within each MX Zone may enfront a Passage.

2.6.6 A bikeway network consisting of Bicycle Trails, Bicycle Routes and/or Bicycle Lanes shall be provided throughout each Neighborhood. The TVDD bikeway network should be connected to existing or proposed regional networks wherever possible. See Appendix B for approved Bikeway Assemblies and Bicycling Facilities.

2.6.7 Exemptions to standards for Bikeways may be approved by Special Permit.

2.6.8 Where Rear Alleys are provided, they should be paved to accommodate vehicular travel, with drainage by inverted crown at the center or with roll curbs at the edges.

2.6.9 VEHICULAR LANES

a. Thoroughfares may include vehicular lanes in a variety of widths for parked and for moving vehicles, including bicycles. The standards for vehicular lanes shall be as shown in Table 2B and Table 2C.

b. Retrofit of an existing thoroughfare may be accomplished in the Vehicular Lanes by techniques including but not restricted to: restriping, inserting bikeways, changing one-way thoroughfares to two-way, reducing curb radii, adding onstreet parking, changing parallel parking to diagonal, adding planted medians, raising crosswalks, and/or removing pavement width by adding bioretention areas.

2.6.10 PUBLIC FRONTAGES

a. The Public Frontage contributes to the character of the MX Zone, and includes sidewalks, curbs, planters, offstreet bikeways, public lighting, and street trees.

b. Public Frontages shall be designed as shown in Table 2D and Table 2E.

c. Within the Public Frontages, the prescribed types of Public Planting shall be as shown in Table 2D, Table 2E, and Table 2G. The spacing may be adjusted by Special Permit to accommodate specific site conditions.

d. Retrofit of an existing thoroughfare may be accomplished in the Public Frontage by techniques including but not restricted to: widening sidewalks, creating bumpouts, adding trees, and/or adding bioretention areas as medians or planting strips.

e. Vehicular thoroughfares with a design speed of 15 mph or less may have walkways on only one side. Such thoroughfares that are less than 15 feet right-of-way shall be exempt from walkway requirements.

f. The introduced landscape shall consist primarily of durable species tolerant of soil compaction, as provided on Table 2G (Public Planting).

g. The Public Frontage shall include trees planted in a regularly-spaced allee pattern of single or alternating species with shade canopies of a height that, at maturity, clears at least one story. At retail frontages, the spacing of the trees may be irregular, to avoid visually obscuring the shopfronts.

h. Streets with a right-of-way width of 20 feet or less shall be exempt from the tree requirement.

i. Lighting fixtures in the Public Frontage shall have full cutoff luminaires.

2.7 CIVIC ZONES

2.7.1 GENERAL

a. Civic Zones dedicated for public use are designated on the Regulating Plan as Civic Space (CS), Civic Building (CB), or more generally Civic Zone (CZ).

b. Parking requirements for Civic Zones shall be determined by Special Permit.

2.7.2 CIVIC SPACE (CS) GENERAL TO ZONES MX1, MX2

a. Civic Spaces are intended primarily for use by pedestrians and bicyclists.

b. Each Neighborhood shall assign at least 10% of its developed area to Civic Space.

c. Civic Spaces shall be designed as generally described in Table 2F.

d. The North Neighborhood and the South Neighborhood shall each contain at least one main Civic Space. A main Civic Space shall conform to Table 2F (Civic Space) standards for green, square, or plaza.

e. Each Civic Space, except for playgrounds and pocket parks, should have a minimum of 50% of its perimeter enfronting a thoroughfare.

f. Civic Spaces should include outdoor fitness, water features, public art and sculpture and/or outdoor performance venues.

2.7.3 CIVIC BUILDINGS (CB) GENERAL TO ZONES MX1, MX2

a. Civic Building sites should be located within or adjacent to a Civic Space, or at the visual termination of a significant thoroughfare.

b. The requirements of Chapter 3 may be modified for Civic Buildings by Special Permit.

2.8 DENSITY CALCULATIONS

2.8.1 All areas of the Neighborhood Plan site shall be considered cumulatively the Net Site Area. The Net Site Area shall be allocated to the various MX Zones according to the parameters specified in Table 2A (Standards for Neighborhood Plans).

2.8.2 Density shall be expressed in terms of housing units per acre as specified for the area of each MX Zone by Table 2A (Standards for Neighborhood Plans). For purposes of density calculation, the MX Zones include the thoroughfares but not land assigned to Civic Zones. Ten percent (10%) of the housing units shall be in the Affordable Housing range.

2.9 SPECIAL REQUIREMENTS

2.9.1 Neighborhood Plans may designate any of the following provisions on the Regulating Plan or by geographic description:

- **a.** A differentiation of the Thoroughfares as A-Grid and B-Grid. Buildings along the A-Grid shall be held to the highest standards of this Code in support of pedestrian activity. Buildings along the B-Grid may be more readily considered for Special Permits allowing automobile-oriented design. The frontages along the B-Grid shall not exceed 30% of the total length of frontages in each TVDD Neighborhood.
- **b.** Mandatory (or Recommended) Retail Frontage, requiring (or advising) that a building provide a Shopfront at sidewalk level along the entire length of its Private Frontage.
- **c.** Mandatory (or Recommended) Gallery Frontage, requiring (or advising) that a building provide a permanent cover over the sidewalk, either cantilevered or supported by columns. The Gallery Frontage designation may be combined with a Retail Frontage designation.
- **d.** Mandatory (or Recommended) Arcade Frontage, requiring (or advising) that a building overlap the sidewalk such that the first floor facade is accessed through a series of arches. The Arcade Frontage designation may be combined with a Retail Frontage designation.
- **e.** Mandatory (or Recommended) Porchfront, requiring (or advising) that a porch be included in the Private Frontage.
- **f.** Build-to Line, requiring the placement of the building facade along a line (within the applicable setbacks as shown on Table 3F and Table 3G.
- **g.** Coordinated Frontage, requiring that the Public Frontage (Table 2D Public Frontages–General) and Private Frontage (Table 3B Building Form–Private Frontages) be coordinated as a single, coherent landscape and paving design.
- **h.** Mandatory (or Recommended) Visual Termination locations, requiring (or advising) that the building have architectural distinction appropriate to the location, as approved by Special Permit.
- **i.** Mandatory (or Recommended) View Corridor, requiring that new development not impede the sight line shown on the Regulating Plan, as judged from the centerline of the thoroughfare on which the View Corridor is marked.
- **j.** Cross Block Passages that are perpendicular to alleys, requiring that a minimum 8-foot-wide pedestrian access be reserved between buildings.
- **k.** Others as approved by Special Permit.

CHAPTER 3. LOTS & BUILDING PLANS

3.1. INSTRUCTIONS

3.1.1. Lots and buildings located within a Regulating Plan governed by this Code shall be subject to the requirements of this Chapter.

3.1.2. Building and site plans submitted under this Chapter shall meet the requirements of the application form, Site Plan Review fee in Section 5.3 (Procedures and Requirements for Site Plans) of the zoning regulations, and show the following in compliance with the standards described in this Chapter:

a. For preliminary site and building approval:
- Building Placement, in plan and elevation
- Building Form, in plan and elevation
- Building Function and Specific Use
- Parking Location

b. For final approval, in addition to the above:
- Landscape
- Stormwater Management
- Signs
- Lighting
- Architecture
- Special Requirements, if any

3.1.3. The requirements of this Chapter may be modified for Civic Buildings by Special Permit.

3.2. SPECIAL REQUIREMENTS

3.2.1. To the extent that a Regulating Plan or geographic description designates one or more of the following Special Requirements, standards shall be applied as follows. See Table 3B Private Frontages.

a. A-Grid: Buildings along the A-Grid shall be held to the highest standards of this Code in support of pedestrian activity. B-Grid: Buildings may be more readily considered for Special Permits allowing automobile-oriented design.

b. Retail Frontage: The building shall provide a shopfront at sidewalk level along the entire length of its Principal Frontage. The shopfront shall be glazed in clear glass no less than 50% of the first story area between 2 and 12 feet above the sidewalk. It may be shaded by an awning overlapping the sidewalk as generally illustrated in Table 3B (Building Form Private Frontages). Awnings, if present, shall be 3 feet minimum depth. Retractable awnings are encouraged. For calculating glazing, include the muntins as part of the glass but not the mullions, and include the sides of an alcove entrance as façade area. Corner stores with a Secondary Frontage on streets of less than 30 feet right-of-way may reduce the glazing requirement on the Secondary Frontage to apply only to 30% of the depth of the retail space, as measured from the building corner.

- **c.** Gallery Frontage: The building shall provide a permanent cover over the sidewalk, either cantilevered or supported by columns. The Gallery Frontage designation may be combined with a Retail Frontage designation.
- **d.** Arcade Frontage: The building shall overlap the sidewalk such that the first floor facade is accessed through a series of arches. The Arcade Frontage designation may be combined with a Retail Frontage designation.
- **e.** Porchfront: A porch of a minimum 6 feet depth shall be included in the Private Frontage.
- **f.** Build-to Line: The building facade shall be placed along a line as shown on the Regulating Plan
- **g.** Coordinated Frontage: The Public Frontage and Private Frontage shall be coordinated as a single, coherent landscape and paving design.
- **h.** Visual Termination: The building shall have architectural distinction appropriate to its prominent axial location, as approved by Special Permit.
- **i.** View Corridor: Development shall not impede the sight line shown on the Regulating Plan, as judged from the centerline of the thoroughfare on which the View Corridor is marked.
- **j.** Cross Block Passages: A minimum 8-foot-wide pedestrian access shall be reserved between buildings.
- **k.** Others as designated.

3.3. BUILDING PLACEMENT

3.3.1. GENERAL TO ALL ZONES MX1, MX2

- **a.** Newly platted lots shall be dimensioned according to Table 3F and Table 3G.
- **b.** Buildings shall be placed wherever possible for maximum energy efficiency, per Appendix C: Building Orientation.
- **c.** One Principal Building at the frontage, and one outbuilding to the rear of the Principal Building, may be built on each lot as shown in Definitions Illustrated.
- **d.** Facades shall be built parallel to a rectilinear Principal Frontage Line or to the tangent of a curved Principal Frontage Line. Facades shall occupy a minimum percentage of the frontage width at the setback, specified as Frontage Buildout on Table 3F and Table 3G.
- **e.** Setbacks for Principal Buildings shall be as shown on Table 3F and Table 3G.
  Setbacks for buildings next to existing development shall be determined by Special Permit.
- **f.** Rear setbacks for outbuildings shall be a minimum of 12 feet measured from the centerline of the Rear Alley easement. In the absence of a Rear Alley, the rear setback shall be as shown on Table 3F and Table 3G.
- **g.** For through lots, there shall be two Principal Frontages that shall comply with Table 3B (Private Frontages) and Section 3.4. Alleys are not considered frontages.
- **h.** The principal entrance shall be on a Frontage Line.
- **i.** Public entrances on commercial or mixed-use buildings should be no more than 32 feet apart, including entrances on adjacent attached buildings.

3.4. BUILDING FORM

3.4.1. GENERAL TO ZONES MX1, MX2

- **a.** The Private Frontage of buildings shall conform to and be allocated in accordance with Table 3B (Private Frontages) and Table 3F and Table 3G.

b. Buildings shall be configured whenever possible for maximum energy efficiency, per Appendix C (Surface to Volume Ratio).

c. Retail and mixed-use buildings shall be configured whenever possible according to Appendix C (Retail Typology Form-based Graphics).

d. Shopfronts shall conform to the standards in Section 3.10.1b. Galleries shall be a minimum of 5 feet deep.

e. Buildings on corner lots shall have two Private Frontages. Standards for the second and third Lot Layers pertain only to the Principal Frontage. Standards for the first Lot Layer pertain to both frontages. See Definitions Illustrated.

f. For each residential front unit there shall be a habitable room (as defined in the State Building and Energy Code) and window facing the Principal Frontage.

g. Building heights, stepbacks, and expression lines shall conform to Table 3A (Building Form – Height).

h. Stories may not exceed 16 feet in height from finished floor to finished floor, except for a first floor Commercial Function, which shall be a minimum of 14 feet with a maximum of 27 feet. A single floor level exceeding 16 feet, or 27 feet at ground level, shall be counted as 2 stories. Mezzanines extending beyond 33% of the floor area shall be counted as an additional story.

i. In a parking structure or garage, each above-ground level counts as a single story regardless of its relationship to habitable stories.

j. Height limits do not apply to masts, belfries, clock towers, chimneys, water tanks, pilot houses, or elevator bulkheads that occupy less than 20% of the roof area.

k. Height limits do not apply to attics within pitched roofs. Attics may be habitable per the State Building and Energy Code.

l. Habitable space within a mansard roof is considered a story.

m. Utility meters shall be hidden from the public frontage.

n. Loading docks and service areas shall be allowed on frontages only by Special Permit, including car share and autonomous vehicle pickup and dropoff areas.

o. In the absence of a building facade along any part of a frontage line, a streetscreen shall be built in alignment with the facade. Streetscreens shall be between 3.5 and 8 feet in height. The streetscreen may be replaced by a hedge or fence by Special Permit. Streetscreens shall have openings no larger than necessary to allow automobile and pedestrian access.

p. A first level Residential or Lodging Function may be raised from average sidewalk grade if fully accessible from another entrance. If at grade, the building should be set back at least 6 feet from the sidewalk for privacy, with a low wall, fence, or hedge at the frontage line.

q. Corner buildings with shopfronts shall have chamfered corners on the first story.

3.4.2. ENCROACHMENTS IN ZONES MX-1 AND MX-2

3. Awnings, Arcades, and Galleries may encroach the sidewalk to within 2 feet of the curb but must clear the sidewalk vertically by at least 8 feet.

4. Balconies, porches, bay windows, stoops, lightwells, and terraces may encroach the first Lot Layer by Special Permit.

5. Maximum encroachment heights for Arcades shall be as shown on Table 3A.

3.5 BUILDING FUNCTION

3.5.1 GENERAL TO ZONES MX1, MX2

- **a.** Buildings in each MX Zone shall conform to the functions on Table 3C (Building Function) and Table 3D (Specific Function & Use). Secondary Uses requiring Special Permits are listed on Table 3D.
- **b.** Light Manufacturing may be allowed by Special Permit.
- **c.** Home Occupations are permitted that (1) are clearly incidental to and comparable with the residential use of the property and surrounding residential uses; and (2) employ no more than 1 person, other than family members residing in the home.
- **d.** Home Occupation work quarters may be visible from the frontage.
- **e.** Retail Functions should generally follow Appendix C: Retail Typology Form-Based Graphics.

3.6 PARKING MINIMUMS

3.6.1 GENERAL TO ALL ZONES MX1, MX2

- **a.** Numbers of parking spaces shall be provided per Table 3C (Building Function and Parking).
- **b.** Dedicated parking spaces within 1000 feet of the building Principal Entrance shall count toward the parking minimum.
- **c.** On-street parking along the building frontages shall count toward the parking minimum.
- **d.** Required parking spaces may be reduced by Special Permit according to the Shared Parking Factors on Table 3C.

3.7 PARKING LOCATION

3.7.1 GENERAL TO ZONES MX1, MX2

- **a.** Parking structures or tuck-under parking are preferred over surface parking.
- **b.** Parking structures shall have Liner Buildings lining the first and second stories.
- **c.** All parking lots, garages, and parking structures shall be located at the third Lot Layer.
- **d.** Parking shall be accessed by Rear Alleys or B Streets, when such are available, or side streets.
- **e.** Open parking areas shall be masked from the frontage by a building or streetscreen.
- **f.** Vehicular entrances to parking lots, garages, and parking structures shall be no wider than 24 feet if two-way or 12 feet if one-way.
- **g.** Pedestrian exits from all parking lots, garages, and parking structures should be directly to a frontage line (i.e., not directly into a building) whenever possible.
- **h.** A minimum of one space on a bicycle rack shall be provided within the Public Frontage or Private Frontage for every ten vehicular parking spaces. See Appendix B.

3.8 SIGNS

3.8.1 GENERAL TO ZONES MX1, MX2

- **a.** Specific sign standards are listed and illustrated on Table 3E.
- **b.** The address number shall be no more than 6 inches high and shall be attached to the building in proximity to the Principal Entrance or at a mailbox or as designated by the USPS or Fire Marshal.

c. Illuminated signage shall be externally illuminated only, except that signage within shopfront glazing may be neon lit.

3.8.2 SPECIFIC TO ZONE MX1

a. One blade sign for each business may be permanently installed perpendicular to the facade within the first Lot Layer. Such a sign shall not exceed 4 square feet and shall clear 8 feet above the sidewalk.

b. One single- or double-post yard sign for each business may be permitted by Special Permit, provided it is set back at least 6 feet from the Frontage Line, does not exceed 6 square feet excluding posts, and does not exceed 6 feet high measured from the ground at the post location.

3.8.3 SPECIFIC TO ZONE MX2

a. Blade signs, not to exceed 6 square ft. for each separate business entrance, may be attached to and should be perpendicular to the facade, and shall clear 8 feet above the sidewalk.

b. A single external permanent sign band may be applied to the facade of each building, providing that such sign not exceed 3 feet in height by any length.

3.9 LIGHTING

3.9.1 SPECIFIC TO THE ZONE MX-1

a. Lighting fixtures in the Private Frontage shall have full cutoff luminaires, with dimmers, time switches, or motion sensors.

b. Maximum permitted Initial Lamp Lumens shall be 3.3 - 4.2 lumens per square foot.

c. Maximum Lamp Allowance shall be 24,000 lumens.

d. Lighting curfew for non-residential Functions is 10 PM or close of business, whichever is later.

3.9.2 SPECIFIC TO ZONE MX-2

a. Lighting fixtures in the Private Frontage shall have full cutoff luminaires or low-wattage non-full cutoff luminaires, with dimmers, time switches, or motion sensors.

b. Maximum permitted Initial Lamp Lumens shall be 7.6 - 9.7 lumens per square foot.

c. Maximum Lamp Allowance shall be 44,000 lumens.

d. Lighting curfew for non-residential Functions is 12 Midnight or close of business, whichever is later.

3.10 ARCHITECTURE

3.10.1 GENERAL TO ALL BUILDINGS IN ZONES MX1, MX2

a. Building wall materials shall be combined on each facade only horizontally, with the heavier below the lighter.

b. All openings, including porches, galleries, arcades and windows, with the exception of shopfronts and ganged windows in loft buildings, shall be square or vertical in proportion. Loft buildings may have three vertical windows side by side in a horizontal opening, or paired windows in a square opening.

c. Total combined area of openings above the first story of all buildings other than loft buildings shall not exceed 40% of the total building wall area, with each facade being calculated independently.

d. Shutters, if provided, shall be proportioned as if they could cover the window.

e. Sliding doors are prohibited on the first story along frontages.

f. Gabled roofs, if provided, shall be symmetrically sloped no less than 4 in 12. Hipped roofs, if provided, shall be symmetrically sloped no less than 3 in 12. Roofs for porches and attached sheds shall be no less than 2 in 12.

g. The exterior finish material on all facades shall be limited to stone, stone veneer, brick, brick veneer, wood clapboard, wood shingles, cementitious siding and / or lime-based stucco.

h. Flat roofs shall be enclosed by parapets a minimum of 42 inches high, or as required to conceal mechanical equipment from the ground and from neighboring buildings.

i. Balcony and porch railings shall be made of painted wood or metal.

j. Fences or walls at the first Lot Layer shall be brick, brick veneer, stone, stone veneer, lime-based stucco, painted metal or painted wood. Stone walls shall be laid so that most stones and the predominant visual pattern are horizontal.

3.10.2 SPECIFIC TO COMMERCIAL, MIXED USE AND MULTI-FAMILY BUILDINGS OVER 7500 SQUARE FEET IN ZONES MX1, MX2

a. Building design should use the shared principles of Connecticut's dominant architectural traditions: Colonial, Federal, Greek Revival, Victorian, Colonial Revival, American Foursquare, and New England mill and loft buildings.

b. No more than 5 materials shall be used on one facade, including the trim, roof and foundation.

c. Windows other than shopfront windows or ganged windows in a loft building shall be vertically proportioned and double-hung, with vertically proportioned panes or divisions.

d. Windows shall align vertically and horizontally. Alignment may be centered or along edges.

e. Chimneys visible from frontages shall be brick, brick veneer, stone or stone veneer.

f. Shading of glazing techniques shall be utilized wherever possible. See Appendix C.

CHAPTER 4. TABLES

TABLE 1A. INTENT AND PURPOSE: MX ZONE

MX-1
The Mixed-1 Zone consists of a mixed use but primarily residential fabric of attached building types. These may be apartment buildings, courtyard buildings, or townhouses. Setbacks and landscaping are variable. Streets with curbs and sidewalks create medium-sized blocks.

General Character: Mix of townhouses and small apartment buildings with scattered commercial activity; balance between landscape and buildings; presence of pedestrians. The MX-1 Zone generally provides residential support for the commercial destinations of MX-2, and is walkable to Newington Station. Parking is behind buildings or in structured parking wrapped with residential uses.

Building placement: shallow to medium front and side yard setbacks
Frontage types: porches, low fences, stoops, front gardens, galleries, occasional shopfronts
Building heights: 2-3 story with a few 4-story mixed-use buildings
Civic Space types: greens, squares, playgrounds, pocket parks, dog parks

MX-2
The Mixed-2 Zone consists of higher density mixed use buildings that accommodate retail, offices, rowhouses, and apartments. Building types are attached, which may be apartment buildings, courtyard buildings, perimeter blocks, or townhouses. This zone has a tight network of streets with wide sidewalks, steady street tree planting, and buildings close to the sidewalk. Parking is in structured parking wrapped with residential or commercial uses, and bicycle parking.

General Character: Shops mixed with townhouses, larger apartment buildings, offices, workplace buildings; predominantly attached buildings; trees within the public right-of-way, substantial pedestrian activity. The MX-2 Zone is close to Newington Station and along Cedar Street, providing commercial destinations for commuters and visitors as well as residents of the TVDD.

Building placement: shallow setbacks or none; buildings oriented to street defining a street wall
Frontage types: shopfronts, stoops, galleries, arcades
Building heights: 2-6 story
Civic Space types : greens, squares, plazas, playgrounds, pocket parks

TABLE 2A. STANDARDS FOR NEIGHBORHOOD PLANS

	MX-1 ZONE	MX-2 ZONE
a. ALLOCATION OF ZONES per Neighborhood		
North Neighborhood	70-90%	10-30%
South Neighborhood	20-40%	60-80%
b. NET RESIDENTIAL DENSITY* (see Section 2.8)		
Density by Zone	40 units / ac. Net	80 units / ac. net

*Net Density calculation includes Thoroughfare area, but not Civic Space or already preserved lands.

c. BLOCK SIZE		
Block Perimeter	2400 ft max	2000 ft max

TABLE 2B. THOROUGHFARES – VEHICULAR LANE DIMENSIONS

TABLE 2B: Vehicular Lane Dimensions. This table assigns lane widths to MX Zones. The Design ADT (Average Daily Traffic) is the determinant for each of these sections. The most typical assemblies are shown in Table 2C and complete assemblies, if preferred, in Appendix A. Specific requirements for truck and transit bus routes and truck loading shall be decided by Special Permit.

DESIGN SPEED	TRAVEL LANE WIDTH	MX1	MX2
Below 20 mph	8 feet	□	□
20-25 mph	9 feet	■	■
20-25 mph	10 feet	■	■
20-25 mph	11 feet	■	■

DESIGN SPEED	PARKING LANE WIDTH		
20-25 mph	(Angle 18 feet)		■
20-25 mph	(Parallel) 7 feet	■	■
20-25 mph	(Parallel) 8 feet	■	■

DESIGN SPEED	EFFECTIVE TURNING RADIUS		
Below 20 mph	5-10 feet	■	■
20-25 mph	10-15 feet	■	■

■ BY RIGHT

□ BY SPECIAL PERMIT

TABLE 2C. THOROUGHFARES – VEHICULAR LANE & PARKING ASSEMBLIES

TABLE 2C: Vehicular Lane/Parking Assemblies. The projected design speeds determine the dimensions of the vehicular lanes and turning radii assembled for Thoroughfares.

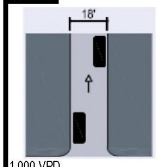
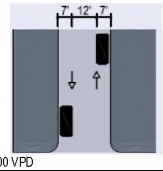
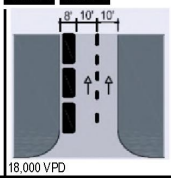
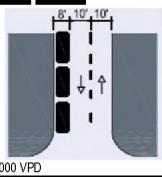
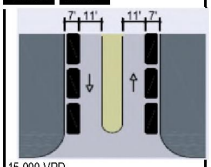
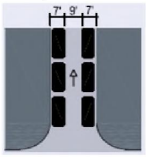
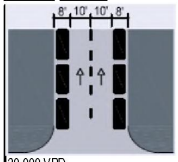
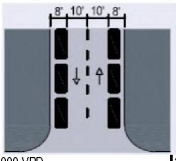
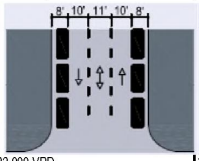
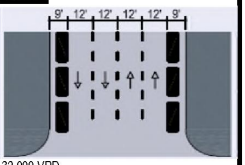
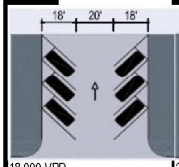
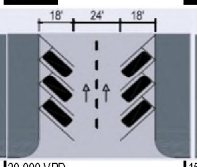
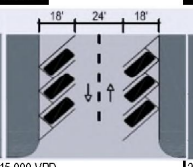
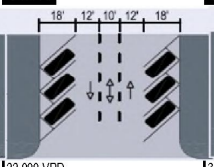
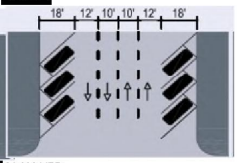
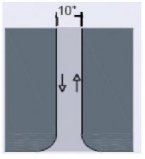
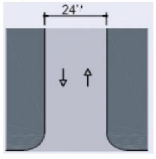
	ONE WAY MOVEMENT →		TWO WAY MOVEMENT →		
a. YIELD PARKING	**MX1** 		**MX1** 		
Design ADT	1,000 VPD		1,000 VPD		
Pedestrian Crossing	5 Seconds		7 Seconds		
Design Speed	20-25 MPH		20-25 MPH		
b. PARKING ONE SIDE PARALLEL	**MX1** 	**MX1 MX2** 	**MX1 MX2** 	**MX1 MX2** 	
Design ADT	5,000 VPD	18,000 VPD	16,000 VPD	15,000 VPD	
Pedestrian Crossing	5 Seconds	8 Seconds	8 Seconds	11 Seconds	
Design Speed	20 -25 MPH	20-25 MPH	20-25 MPH	20-25 MPH	
c. PARKING BOTH SIDES PARALLEL	**MX1** 	**MX1 MX2** 	**MX1 MX2** 	**MX2** 	**MX2** 
Design ADT	8,000 VPD	20,000 VPD	15,000 VPD	22,000 VPD	32,000 VPD
Pedestrian Crossing	7 Seconds	10 Seconds	10 Seconds	13 Seconds	15 Seconds
Design Speed	Below 20 MPH	20-25 MPH	20-25 MPH	20-25 MPH	20-25 MPH and above
d. PARKING BOTH SIDES DIAGONAL	**MX2** 	**MX2** 	**MX2** 	**MX2** 	**MX2** 
Design ADT	18,000 VPD	20,000 VPD	15,000 VPD	22,000 VPD	31,000 VPD
Pedestrian Crossing	15 Seconds	17 Seconds	17 Seconds	20 Seconds	23 Seconds
Design Speed	Below 20 MPH	20 - 25 MPH	20 - 25 MPH	20-25 MPH	20-25 MPH
e. PARKING ACCESS			**MX2** 	**MX2** 	
Design ADT			n/a	n/a	
Pedestrian Crossing			3 Seconds	6 Seconds	
Design Speed			n/a	n/a	

TABLE 2D. THOROUGHFARES – PUBLIC FRONTAGE, GENERAL

TABLE 2D: Public Frontages General: The Public Frontage is the area between the private lot line and the edge of the vehicular lanes. Dimensions are given in Table 2C and Appendix A.

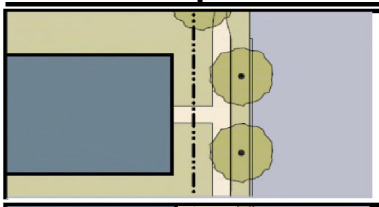
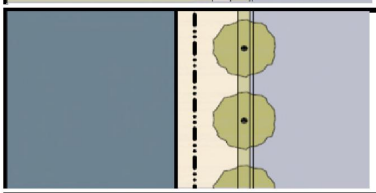
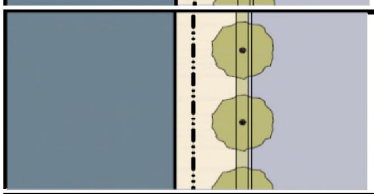
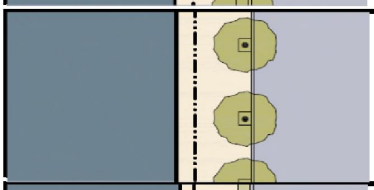
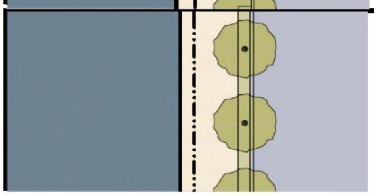
	PLAN	
	LOT ▶ ◀ R.O.W. PRIVATE FRONTAGE ▶ ◀ PUBLIC FRONTAGE	
a. (ST) For Street: This frontage has raised curbs drained by inlets and sidewalks separated from the vehicular lanes by individual or continuous planters, with parking on one or both sides. The landscaping consists of street trees of a single or alternating species aligned in a regularly spaced allee, with the exception that Streets with a right-of-way (R.O.W.) width of 40 feet or less are exempt from tree requirements.		MX1 MX2
b. (DR) For Drive: This frontage has raised curbs drained by inlets and a wide sidewalk or paved path along one side, related to a park or waterfront. It is separated from the vehicular lanes by individual or continuous planters. The landscaping consists of street trees of a single species or alternating species aligned in a regularly spaced allee.		MX1 MX2
c. (AV) For Avenue: This frontage has raised curbs drained by inlets and wide sidewalks separated from the vehicular lanes by a narrow continuous planter with parking on both sides. The landscaping consists of a single tree species aligned in a regularly spaced allee.		MX1 MX2
d. (CS) (AV) For Commercial Street or Avenue: This frontage has raised curbs drained by inlets and very wide sidewalks along both sides separated from the vehicular lanes by separate tree wells with grates and parking on both sides. The landscaping consists of a single tree species aligned with regular spacing where possible but clearing the shopfront entrances.		MX2
e. (BV) For Boulevard: this frontage has Access Lanes on both sides. It consists of raised curbs drained by inlets and sidewalks along both sides, separated from the vehicular lanes by planters. The landscaping consists of double rows of a single tree species aligned in a regularly spaced allee.		MX1 MX2

TABLE 2E. THOROUGHFARES – PUBLIC FRONTAGES, SPECIFIC

TABLE 2E: Public Frontages - Specific. This table assembles prescriptions and dimensions for the Public Frontage elements - curbs, walkways and planters - relative to specific Thoroughfare types within MX Zones. Appendix A assembles all of the Public Frontage and Vehicular Lane elements. Locally appropriate planting species and lighting types are listed on Table 2G and Table 2H.

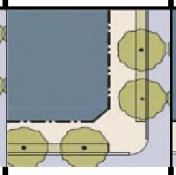
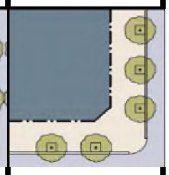
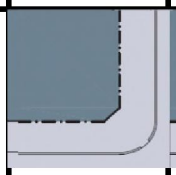
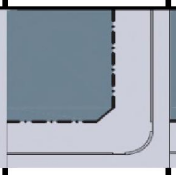
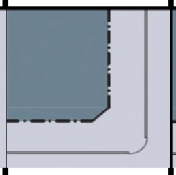
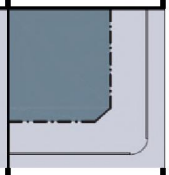
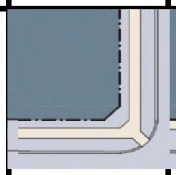
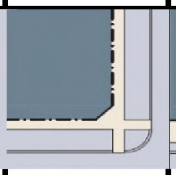
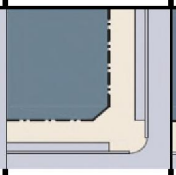
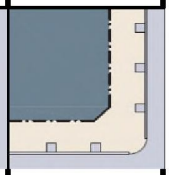
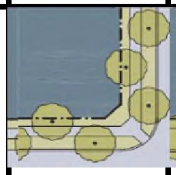
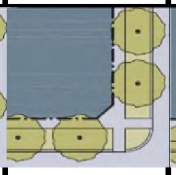
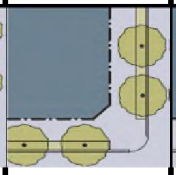
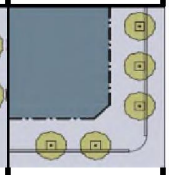
MX ZONE Public Frontage Type	MX1 ST-DR-AV	MX1 MX2 ST-DR-AV-BV	MX2 CS-DR-AV-BV	MX2 CS-DR-AV-BV
a. Assembly: The principal variables are the type and dimension of curbs, walkways, planters and landscape.				
Total Width	12-18 feet	12-18 feet	18-24 feet	18-30 feet
b. Curb. The detailing of the edge of the vehicular pavement incorporating drainage.				
Type	Raised Curb	Raised Curb	Raised Curb	Raised Curb
Radius	5-20 feet	5-20 feet	5-20 feet	5-20 feet
c. Walkway. The hard surface dedicated exclusively to pedestrian activity.				
Type	Sidewalk	Sidewalk	Sidewalk	Sidewalk
Width	4-8 feet	4-8 feet	12-20 feet	12-30 feet
d. Planter: The layer that accommodates street trees and other landscape materials.				
Arrangement	Regular	Regular	Regular	Opportunistic
Species	Alternating	Single	Single	Single
Planter Type	Continuous Planter	Continuous Planter	Continuous Planter	Tree Well
Planter Width	8 feet - 12 feet	8 feet - 12 feet	4 feet - 6 feet	4 feet - 6 feet
e. Landscape. The recommended plant species. See Table 2G.				
f. Lighting. The recommended Public Lighting. See Table 2H.				

TABLE 2F. CIVIC SPACE STANDARDS

TABLE 2F. Civic Space. This table indicates the general character of public open space appropriate for each MX Zone and some basic standards. Greens, Squares, Plazas and Playgrounds may include water features.

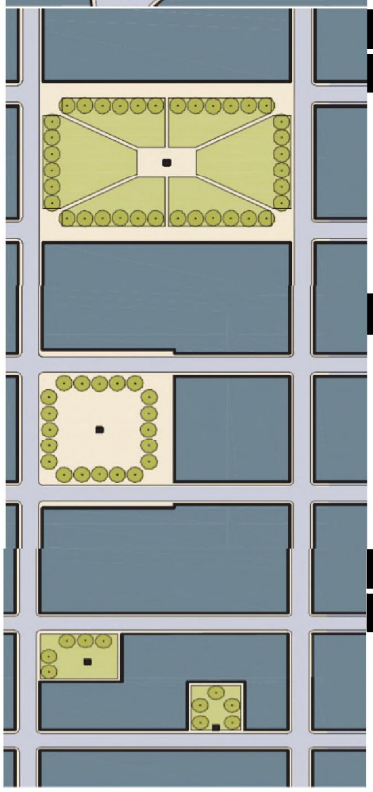
a. Green: An open space, available for unstructured recreation. A green may be spatially defined by landscaping rather than building frontages. Its landscape shall consist of lawn and trees, naturalistically disposed, and may include water features. The minimum size shall be 1/2 acre and the maximum shall be 8 acres.	 MX1 MX2
b. Square: An open place available for unstructured recreation and civic purposes. A square is spatially defined by building frontages. Its landscape shall consist of paths, lawns and trees, formally disposed, and may include water features. Squares should be located at the intersection of important thoroughfares. The minimum size shall be 1/2 acre and the maximum shall be 5 acres.	MX1 MX2
c. Plaza: An open space available for civic purposes and commercial activities. A Plaza shall be spatially defined by building frontages. It shall consist primarily of pavement, and may include water features. Trees are optional. Plazas should be located at the intersection of important streets. The minimum size shall be 1/2 acre and the maximum shall be 2 acres.	MX2
d. Playground: An open space designed and equipped for the recreation of children. A playground should be fenced and may include an open shelter. Playgrounds shall be interspersed within residential areas and may be placed within a block. Playgrounds may be included within parks and greens. There shall be no minimum or maximum size.	 MX1 MX2
e. **Pocket Park**: A small open space suitable for socializing, eating and resting. Pocket parks shall be equipped with benches and plantings, with tables and public art optional. They may be placed alongside thoroughfares or as intimate spaces within blocks, but should be visible from a thoroughfare. The maximum size shall be 1/2 acre.	
f. **Dog Park:** A fenced space for the recreation of dogs accompanied by humans. A dog park shall be allocated and designed by Special Permit.	MX1

TABLE 2G. PUBLIC PLANTING

TABLE 2G: Public Planting. This table shows five common types of street tree shapes and their appropriateness within the MX Zones. The landscape architect preparing the plan selects species appropriate for the bioregion.

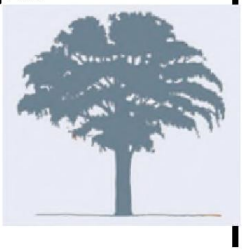
	MX1	MX2	Specifications
Oval 	■	■	
Ball 	■	■	
Pyramid 	■		
Umbrella 	■		
Vase 	■		

TABLE 2H. PUBLIC LIGHTING

TABLE 2H: Public Lighting. Lighting varies in brightness and also in the character of the fixture according to its context. The table shows common types. A lighting specialist selects products appropriate for each placement.

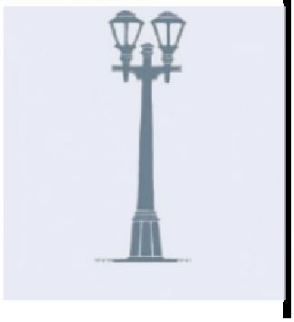
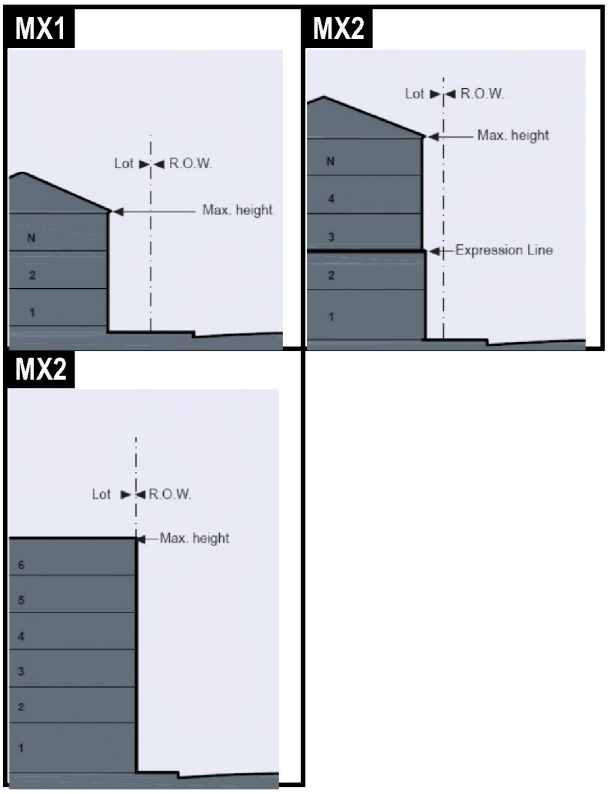
	MX1	MX2	Specifications
Post 	■		
Column 	■		
Double Column 		■	

TABLE 3A. BUILDING FORM - HEIGHT

TABLE 3A: Building Form - Height. This table shows the configurations for different building heights for each MX Zone. Recess Lines and Expression Lines shall occur on higher buildings as shown. N = maximum height as specified in Table 3A.



Stepbacks/Arcade Heights. The diagrams below show Arcade Frontages. Diagrams above apply to all other Frontages.

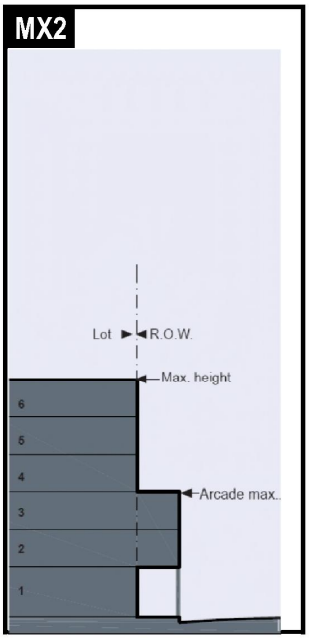


TABLE 3B. BUILDING FORM - PRIVATE

TABLE 3B: Private Frontages. The Private Frontage is the area between the building facade and the front lot line.

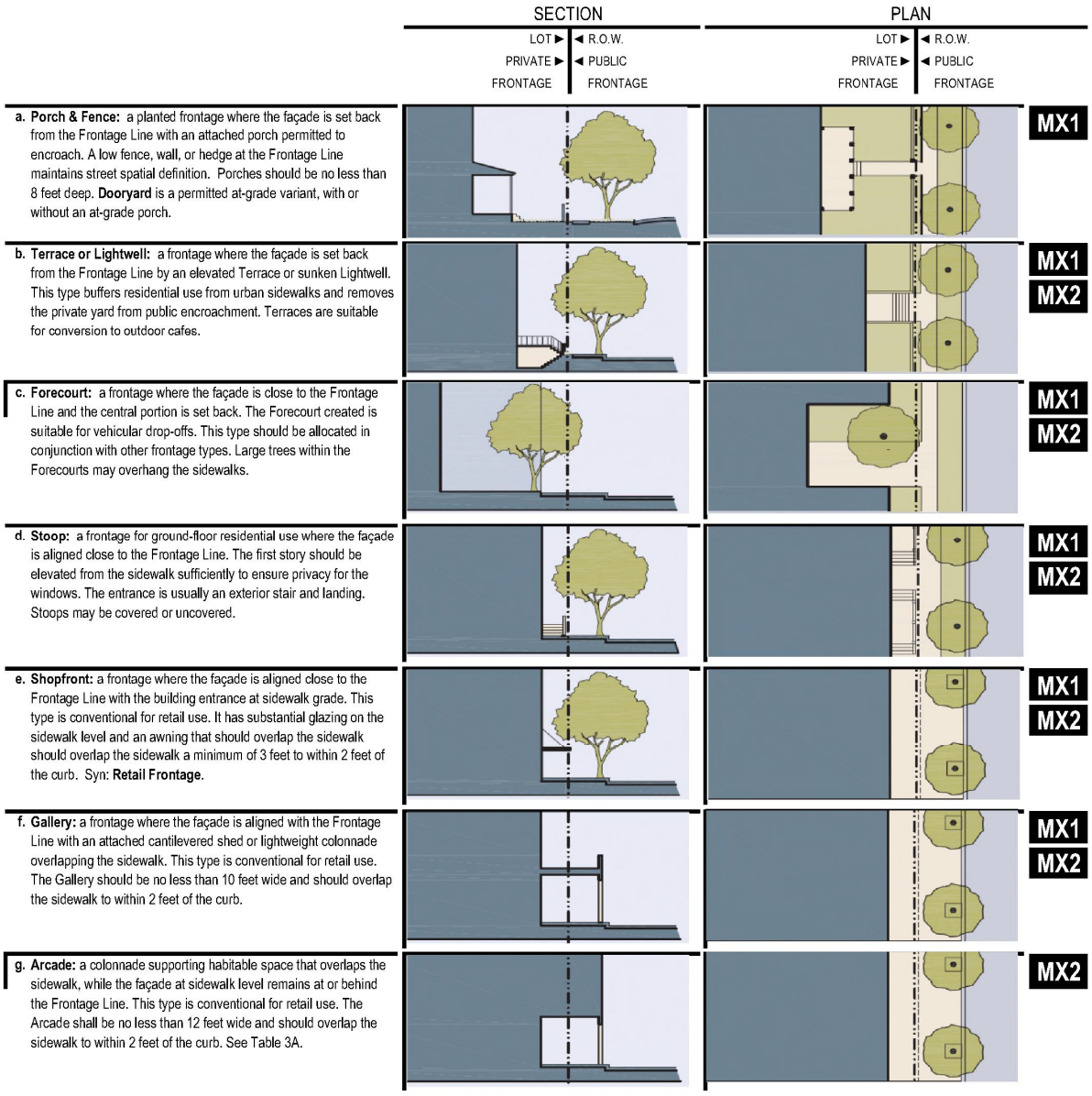


TABLE 3C. BUILDING FUNCTION & PARKING

TABLE 3C: Building Function and Parking Calculations. This table categorizes Building Functions within the TVDD. Parking requirements are correlated to functional intensity. For Specific Function and Use, see Table 3D.

	MX1	MX2
a. RESIDENTIAL	Limited Residential: The number of dwellings on each lot is limited by the requirement of 1.5 parking spaces for each dwelling, a ratio which may be reduced according to the the shared parking standards (see below).	Open Residential: The number of dwellings on each lot is limited by the requirement of 1.0 parking places for each dwelling, a ratio which may be reduced according to the shared parking standards (see below).
b. LODGING	Limited Lodging: The number of bedrooms available on each lot for lodging is limited by the requirement of 1.0 assigned parking place for each bedroom, up to twelve, in addition to the parking requirement for the dwelling. The Lodging must be owner occupied. Food service may be provided. The maximum length of stay shall not exceed ten days.	Open Lodging: The number of bedrooms available on each lot for lodging is limited by the requirement of 1.0 assigned parking place for each bedroom. Food service may be provided at all times. The area allocated for food service shall be calculated with parking according to Retail Function.
c. OFFICE	Limited Office: The building area available for office use on each lot is limited to the first Story of the Principal Building and/or the Accessory Building, and by the requirement of 3.0 assigned parking places per 1,000 square feet of net office space in addition to the parking requirement for each dwelling.	Open Office: The building area available for office use on each lot is limited by the requirement of 2.0 assigned parking places per 1,000 square feet of net office space.
d. RETAIL	Limited Retail: The building area available for Retail use is limited to the first story of buildings at corner locations, not more than one per block, and by the requirement of 4.0 assigned parking places per 1,000 square feet of net Retail space in addition to the parking requirement of each dwelling. The specific use shall be further limited to neighborhood store or food service seating no more than 60.	Open Retail: The building area available for Retail use is limited by the requirement of 3.0 assigned parking places per 1,000 square feet of net Retail space. Retail spaces under 1,500 square feet are exempt from parking requirements.
e. CIVIC	See Specific Use Table	See Specific Use Table
f. OTHER	See Specific Use Table	See Specific Use Table

Parking Calculations. The Shared Parking Factor for two Functions, when divided into the sum of the two amounts as listed on the Required Parking table below, produces the effective parking needed for each site involved in sharing. Conversely, if the Sharing Factor is used as a multiplier, it indicates the amount of building allowed on each site, given the parking available.

REQUIRED PARKING

	MX1	MX2
RESIDENTIAL	1.5 / dwelling	1.0 / dwelling
LODGING	1.0 / dwelling	1.0 / dwelling
OFFICE	3.0 / 1,000 sq.ft.	2.0 / 1,000 sq.ft.
RETAIL	4.0 / 1,000 sq.ft.	3.0 / 1,000 sq.ft.
CIVIC	To be determined by Special Permit	
OTHER	To be determined by Special Permit	

SHARED PARKING FACTOR

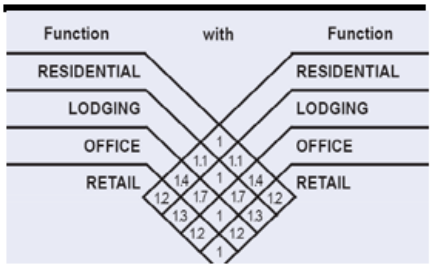


TABLE 3D. SPECIFIC FUNCTION & USE

TABLE 3D: Specific Function and Use. This table expands the categories of Table 3C to delegate specific functions and uses within MX Zones.

a. RESIDENTIAL	MX1	MX2
Mixed Use Block		■
Flex Building	■	■
Apartment Building	■	■
Live/Work Unit	■	■
Row House	■	■
Duplex House	■	■
Courtyard House	■	■
Sideyard House	■	■
Townhouse	■	
House		
Villa		
Accessory Unit	■	■
b. LODGING		
Hotel (no room limit)		■
Inn (up to 12 rooms)	■	■
Bed & Breakfast (up to 5 rooms)	■	■
S.R.O. Hostel	□	□
School Dormitory		
c. OFFICE		
Office Building	■	■
Innovation and Maker Spaces	□	■
Co-Working Spaces	□	■
Live/Work Unit	■	■
d. RETAIL		
Open-Market Building	■	■
Retail Building	■	■
Display Gallery	■	■
Restaurant	■	■
Personal Service	■	■
Fitness Center	□	■
Entertainment	□	■
Kiosk	■	■
Food Truck, Push Cart		■
Liquor Selling Establsihment		■
Adult Entertainment		
e. CIVIC		
Bus Shelter	■	■
Convention Center		
Conference Center		□
Exhibition Center		
Fountain or Public Art	■	■
Library	■	■
Live Theater		■
Movie Theater		■

f. OTHER: AGRICULTURE	MX1	MX2
Grain Storage		
Livestock Pen		
Greenhouse		
Stable		
Kennel	□	□
Pet Daycare	■	■
f. OTHER: ANCILLARY		
Outdoor Dining	□	■
Outdoor Heaters	□	■
Umbrellas	□	■
Rooftop Dining	□	■
Valet Parking	□	■
Truck/RV Parking		□
Outdoor Merchandise Display	□	■
Seasonal Outdoor Sales	□	■
Street Vendor		■
Automatic Teller Machine	■	■
Refuse Collection Facility	■	■
f. OTHER: AUTOMOTIVE		
Gasoline		
Automobile Service		
Truck Maintenance		
Vehicle Charging Station	■	■
Drive-Through Facility		
Rest Stop		
Roadside Stand		
Billboard		
Shopping Center		
Shopping Mall		
f. OTHER: CIVIL SUPPORT		
Fire Station		
Police Sub Station	■	■
Cemetery		
Funeral Home		
Hospital		
Medical Clinic	□	■
f. OTHER: EDUCATION		
College		■
High School		
Trade School		
Elementary School		
Other - Childcare Center	■	■

TABLE 3D. SPECIFIC FUNCTION & USE (cont)

e. CIVIC (continued)	MX1	MX2
Museum		■
Outdoor Auditorium		■
Parking Structure		■
Passenger Platform		□
Dog Park	□	□
Pavillion/Gazebo	■	■
Bus Shelter	■	■
Monument	■	■
Spire	□	■
Clock/Weather Display	□	■
Flagpole	■	■
Playground	■	■
Sports Stadium		
Surface Parking Lot	□	□
Religious Assembly	■	■

f. OTHER: INDUSTRIAL	MX1	MX2
Heavy Industrial Facility		
Light Industrial Facility		
Truck Depot		
R&D/Laboratory Facility	□	■
On-Site Power Generation	□	■
Water Supply Facility		
Sewer and Waste Facility		
Electric Substation		
Wireless Transmitter	□	□
Cremation Facility		
Warehouse		
Produce Storage		
Mini-Storage		

□ By Special Permit

■ By Right

TABLE 3E. SIGNS

TABLE 3E: Signs

	MX1	MX2	Specifications	
Address Sign 	.	.	a. Quantity (max) b. Area c. Width d. Height e. Depth / Projection f. Clearance g. Apex h. Letter Height	1 per address max 2 sf max 24 in max 12 in max 3 in min 4.5 ft n/a max 6"
Awning and Sign 	.	.	a. Quantity (max) b. Area c. Width d. Height e. Depth / Projection f. Clearance g. Apex h. Letter Height i. Valance Height j. Distance from Curb	1 per window n/a max equals width of Facade n/a min 4 ft, see Sec 5.12.7e min 8 ft, 7 ft by Warrant n/a min 5 in, max 10 in max 12 in min. 2 ft.
Band Sign 	▫	.	a. Quantity (max) b. Area (max) c. Width d. Height e. Depth / Projection f. Clearance g. Apex h. Letter Height	1 (2 for corner buildings) 1.5 sf per linear ft Facade max 90% width of Facade max 3 ft max 7 in min 7 ft n/a max 18 in
Blade Sign 	.	.	a. Quantity b. Area (max) c. Width d. Height f. Depth / Projection g. Clearance h. Apex i. Letter Height	1 per Facade, 2 max 4 sf max 4 ft max 4 ft max 4 ft min 8 ft n/a max 8 in

TABLE 3E. SIGNS (cont)

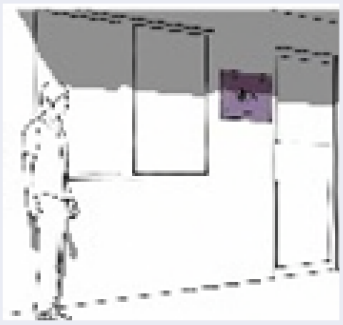
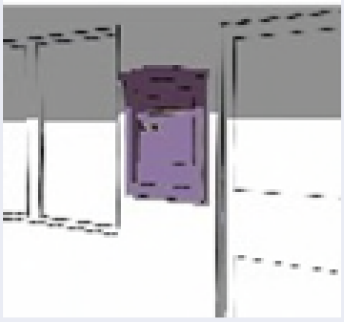
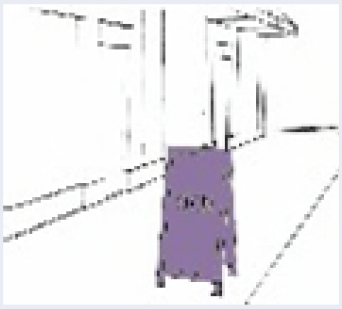
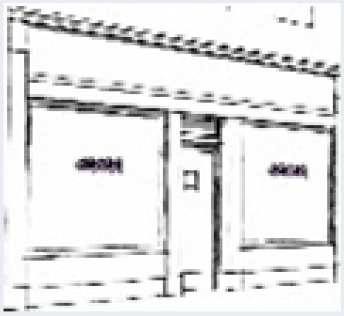
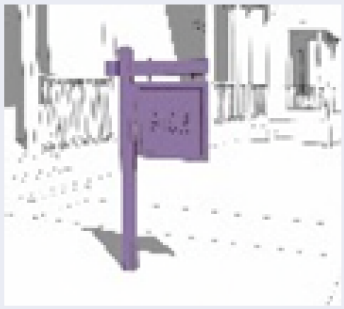
	MX1	MX2	Specifications	
Marquee and Sign 		.	a. Quantity (max) b. Area c. Width (max) d. Height e. Depth / Projection f. Clearance g. Apex h. Letter Height i. Distance from Curb	1 per business n/a entrance plus 2' each side max 50% Story height min 4 ft, max 10 ft min 10 ft n/a n/a min 3 ft.
Nameplate Sign 	.	.	a. Quantity (max) b. Area c. Width d. Height e. Depth / Projection f. Clearance g. Apex h. Letter Height	1 max 3 sf max 18 in max 2 ft max 3 in min 4 ft max 7 ft n/a
Outdoor Display Case 	.	.	a. Quantity b. Area c. Width d. Height f. Depth / Projection g. Clearance h. Apex i. Letter Height	1 max 6 sf max 3.5 ft max 3.5 ft max 5 in min 4 ft n/a n/a
Shingle Sign 	.	.	a. Quantity b. Area c. Width d. Height f. Depth / Projection g. Clearance h. Apex i. Letter Height	1 per facade, 2 max 4 sf max 2 ft max 3 ft max 2 ft min 7 ft n/a max 8 in

TABLE 3E. SIGNS (cont)

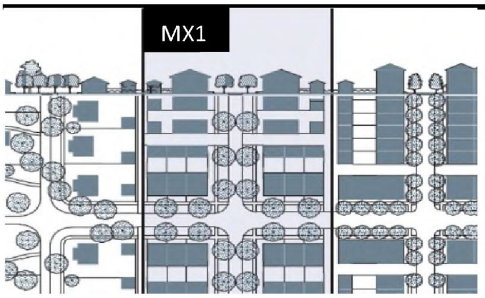
	MX1	MX2	Specifications	
Sidewalk Sign 	▪	▪	a. Quantity b. Area c. Width d. Height f. Depth / Projection g. Clearance h. Apex i. Letter Height	1 per business max 8 sf max 26 in max 42 in n/a n/a max 42 in n/a
Window Sign 	▪	▪	a. Quantity b. Area c. Width d. Height f. Depth / Projection g. Clearance h. Apex i. Letter Height	1 per window max 25% of glass varies varies n/a 4 ft n/a max 8 in
Yard Sign 	▪		a. Quantity b. Area c. Width d. Height e. Depth / Projection f. Clearance g. Apex h. Letter Height	1 max per Lot max 6 sf max 3 ft (not counting post) max 2 ft (not counting post) n/a min 3 ft to sign edge max 6 ft to top of post max 8 in

Sign Module by Mark Keener

▪ By Right

▫ By Special Permit

TABLE 3F. STANDARDS FOR MX-1



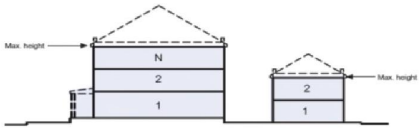
BUILDING FUNCTION (See Table 3C)	
Residential	limited use
Lodging	limited use
Office	limited use
Retail	limited use
BUILDING FORM (See Table 3A)	
Principal Building	4 stories max.
Outbuilding	2 stories max.
LOT OCCUPATION	
Lot Width	18 ft. min., 96 ft. max.
Lot Coverage	70% max.
BUILDING PLACEMENT	
Rearyard	permitted
Perimeter Block	not permitted
Courtyard	not permitted
g. SETBACKS - PRINCIPAL BUILDING	
(g.1) Front Setback Principal	6 ft. min., 18 ft. max.
(g.2) Front Setback Secondary	6 ft. min., 18 ft. max.
(g.3) Side Setback	0 ft. min.
(g.4) Rear Setback	3 ft. min.*
Frontage Buildout	60% min. at setback
h. SETBACKS - OUTBUILDING	
(h.1) Front Setback Principal	20 ft. min. + bldg. setback
(h.2) Front Setback Secondary	0 ft. min. or 3 ft. at corner
(h.3) Side Setback	3 ft. min.
PRIVATE FRONTAGES (See Table 3B)	
Porch & Fence	permitted
Terrace or Lightwell	permitted
Forecourt	permitted
Stoop	permitted
Shopfront & Awning	permitted
Gallery	permitted
Arcade	not permitted
PARKING REQUIREMENTS	
See Table 3C and Section 3.6	

* or 15 feet from center line of alley

"N" stands for any stories above those shown, up to the maximum. Refer to metrics for exact minimums and maximums.

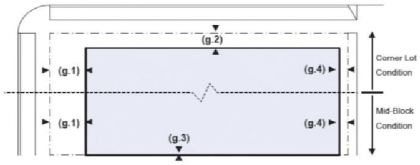
BUILDING FORM – HEIGHT

1. Building height shall be measured in number of stories, excluding attics and raised basements.
2. Stories may not exceed 16 feet in height from finished floor to finished ceiling, except for a first floor commercial function which must be a minumum of 14 ft with a maximum of 27 feet.
3. Height shall be measured to the eave or roof deck as specified on Table 3A.



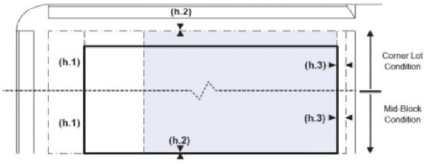
SETBACKS - PRINCIPAL BLDG.

1. The facades and elevations of Principal Buildings shall be distanced from the lot lines as shown.
2. Facades shall be built along the Principal Frontage to the minimum specified width in the table.



SETBACKS - OUTBUILDING

1. The elevations of the outbuilding shall be distanced from the lot lines as shown.



PARKING LOCATION

1. Uncovered parking spaces may be provided within the third Lot Layer as shown in the diagram.
2. Covered parking shall be provided within the third Lot Layer as shown in the diagram.
3. Trash containers shall be stored within the third layer.

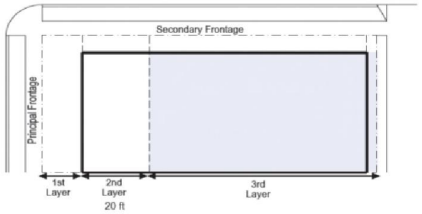
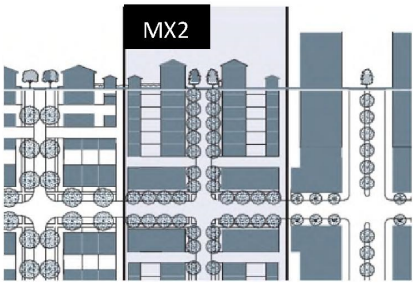


TABLE 3G. STANDARDS FOR MX-2

TABLE 3G: STANDARDS FOR MX-2 ZONES

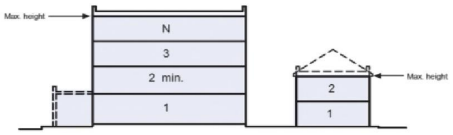


BUILDING FUNCTION (See Table 3C)	
Residential	open use
Lodging	open use
Office	open use
Retail	open use
BUILDING FORM - HEIGHT (See Table 3A)	
Principal Building	6 stories max.
Outbuilding	2 stories max.
LOT OCCUPATION	
Lot Width	no min., 180 ft. max.
Lot Coverage	80% max.
BUILDING PLACEMENT	
Perimeter Block	permitted
Rearyard	permitted
Courtyard	permitted
SETBACKS - PRINCIPAL BUILDING	
(g.1) Front Setback Principal	2 ft. min., 12 ft. max.
(g.2) Front Setback Secondary	2 ft. min., 12 ft. max.
(g.3) Side Setback	0 ft. min., 24 ft. max.
(g.4) Rear Setback	3 ft. min.*
Frontage Buildout	80% min. at setback
SETBACKS - OUTBUILDING	
(h.1) Front Setback Principal	40 ft. max. from rear prop.
(h.2) Front Setback Secondary	0 ft. min. or 2 ft. at corner
(h.3) Side Setback	3 ft. max.
PRIVATE FRONTAGES (See Table 3B)	
Porch & Fence	not permitted
Terrace or Lightwell	permitted
Forecourt	permitted
Stoop	permitted
Shopfront	permitted
Gallery	permitted
Arcade	permitted
PARKING MINIMUMS	
See Table 3C and Section 3.6	

* or 15 feet from center line of alley

BUILDING FORM – HEIGHT

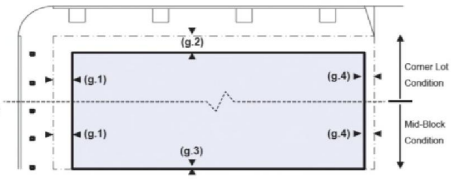
1. Building height shall be measured in number of stories, excluding attics and raised basements.
2. Stories may not exceed 16 feet in height from finished floor to finished ceiling, except for a first floor Commercial function which must be a minumum of 14 ft with a maximum of 27 feet.
3. Height shall be measured to the eave or roof deck as specified on Table 3A
4. Expression Lines shall be as shown on Table 3A



"N" stands for any Stories above those shown, up to the maximum. Refer to metrics for exact minimums and maximums.

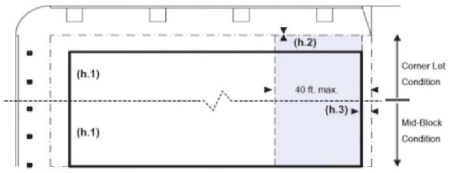
SETBACKS - PRINCIPAL BLDG.

1. The facades and elevations of Principal Buildings shall be distanced from the lot lines as shown.
2. Facades shall be built along the Principal Frontage to the minimum specified width in the table.



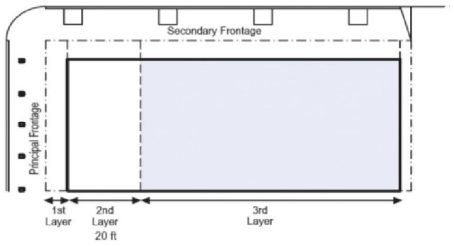
SETBACKS - OUTBUILDING

1. The elevations of the Outbuilding shall be distanced from the lot lines as shown.



PARKING LOCATION

1. Uncovered parking spaces may be provided within the third Lot Layer as shown in the diagram.
2. Covered parking shall be provided within the third Lot Layer as shown in the diagram.
3. Trash containers shall be stored within the third Lot Layer.



CHAPTER 5. DEFINITIONS

This Chapter provides definitions for terms in this Code that are technical in nature or that otherwise may not reflect a common usage of the term. If a term is not defined in this Chapter, then the Town Plan and Zoning Commission shall determine the correct definition. Terms that are capitalized within Definitions are also defined in this Chapter. Items in italics refer to Chapters, Sections, or Tables in this Code.

A-B Grid: a method of designating on a map which streets should be prioritized for pedestrian-oriented frontages. *See Section 2.9.*

A-Street: in a designated A-B Grid, a street prioritized for pedestrian-oriented frontages. (Var: A-Grid)

Access Lane: an outer vehicular lane or lanes of a thoroughfare, designed for slow speeds while inner lanes carry higher speed traffic, and separated from them by a planted median. (Syn: service lane)

Accessory Building: an Outbuilding with an Accessory Unit.

Accessory Unit: an Apartment sharing ownership and utility connections with a Principal Building, either within an Outbuilding or within the Principal Building. *See Definitions Illustrated.* (Syn: **ancillary unit**)

Affordable Housing: safe and sanitary dwellings consisting of rental or for-sale units that have a rent (including utilities) or mortgage payment that is no more than 30% of the income of families earning no more than 80% of area median income.

Allee: a regularly spaced and aligned row of trees usually planted along a thoroughfare or path.

Apartment: a residential unit sharing a building and a lot with other units and/or uses; may be for rent, or for sale as a condominium.

Arcade: a Private Frontage conventional for retail use where the facade is a series of arches supporting habitable space. It overlaps the sidewalk, while the facade at sidewalk level remains at or behind the Frontage Line.

Attached Building: a building that occupies the full Frontage Line, usually leaving the rear of the lot as the sole yard. (Var: **Rowhouse**, **Townhouse**, apartment house, rearyard house)

Attic: the interior part of a building contained within a pitched roof structure, whether habitable or not.

Avenue (AV): a thoroughfare of high vehicular capacity and low to moderate speed, acting as a short distance connector between town centers, and usually equipped with a landscaped median.

B-Street: in a designated A-B Grid, a street that is less important for walkability than an A Street. (Var: B-Grid)

Backbuilding: a single-story structure connecting a Principal Building to an Outbuilding. *See Definitions Illustrated.*

Bed and Breakfast: an owner-occupied lodging type allowed to serve meals to guests.

Bicycle Lane (BL): a dedicated lane for cycling within a moderate-speed vehicular thoroughfare, demarcated by striping.

Bicycle Route (BR): a thoroughfare suitable for the shared use of bicycles and automobiles moving at low speeds.

Bicycle Trail (BT): a bikeway running independently of a vehicular thoroughfare

Bikeway: any designated thoroughfare or part of a thoroughfare for bicycling. See **Bicycle Lane**, **Bicycle Route**, and **Bicycle Trail**.

Block: the aggregate of private lots, passages, and rear alleys, circumscribed by thoroughfares.

Build-to Line: a line within a Build-to Zone to which the facade or elevation of a building is required to align.

By Right: characterizing a proposal or component of a proposal for a plan that complies with this Code and is processed and allowed administratively, without public hearing. See **Special Permit**.

Chamfer: a bevel across the corner of a building at the corner of a block to allow for a centered entrance and improved sight lines.

Civic: pertaining to not-for-profit organizations dedicated to arts, culture, education, recreation, government, transit, and municipal parking.

Civic Building: a building operated by not-for-profit organizations dedicated to arts, culture, education, recreation, government, transit, and municipal parking, or for use approved by the legislative body.

Civic Space: an outdoor area dedicated for public use. Civic Space types are defined by the combination of certain physical constants including the relationships among their intended use, their size, their landscaping and their enfronting buildings. *See Table 2F.*

Civic Zone: designation for public sites dedicated for Civic Buildings and Civic Space.

Code Enforcement Officer: A person appointed by the Town Council to administer and enforce these regulations. Reference to the Code Enforcement Officer may be construed to include Building Inspector, Electrical Inspector, and the like, where applicable.

Commercial: the term collectively defining workplace, Office, Retail, and Lodging Functions.

Courtyard Building: a building that occupies the boundaries of its lot while internally defining one or more private patios.

Curb: the edge of the vehicular pavement that may be raised or flush to a swale. It usually incorporates the drainage system. *See Table 2D and Table 2E and Appendix A.*

Curb Radius: See **Turning Radius**.

Design Review Committee (DRC): a committee to provide advisory review of plans for the Town Planning and Zoning Commission. *See Section 1.4.*

Design Speed: the velocity at which a thoroughfare tends to be driven without the constraints of signage or enforcement. There are four ranges of speed: very low (below 20 MPH); low (20-25 MPH); moderate (25-35 MPH); high (above 35 MPH). (Var: target speed.) *See Table 2B.*

Detached Building: a building that occupies the center of its lot with yards on all sides. (syn: single, edgeyard building) *See Table 3B.*

Dooryard: an at-grade Private Frontage type with a shallow front yard and walkway, usually with a low wall, fence, or hedge at the Frontage Line. *See Table 3B.*

Drive: a thoroughfare along the boundary between a developed and a natural condition, usually along a waterfront or park.

Effective Turning Radius: the measurement of the inside Turning Radius taking parked cars and bike lanes into account. *See Table 2E and Appendix A.*

Elevation: an exterior wall of a building not along a Frontage Line. *See Definitions Illustrated.* See **Facade.**

Encroach: to break the plane of a vertical or horizontal regulatory limit with a structural element, so that it extends into a setback, into the Public Frontage, or above a height limit.

Encroachment: any structural element that breaks the plane of a vertical or horizontal regulatory limit, extending into a setback, into the Public Frontage, or above a height limit.

Enfront: placed along or parallel to a Frontage.

Expression Line: a horizontal line required at a certain level of a façade, created by a variation in material or by a limited projection such as a molding or balcony. *See Table 3A.*

Façade: the exterior wall of a building that is set along or parallel to a Frontage Line. See **Elevation.**

Forecourt: a Private Frontage where a portion of the facade is close to the Frontage Line and the central portion is set back, suitable for dropoffs. *See Table 3B.*

Frontage: the area between a building facade and the vehicular lanes, inclusive of its built and planted components. Frontage is divided into Private Frontage and Public Frontage. *See Table 2D and Table 3B*.

Frontage Buildout: the percentage of lot width occupied by the width of the building facade.

Frontage Line: a lot line bordering a Public Frontage. Facades facing Frontage Lines define the public realm and are therefore more regulated than the Elevations facing other lot lines. *See Definitions Illustrated.*

Full Cutoff: a Luminaire type that does not allow any light to be emitted or reflected above a horizontal plane.

Function: the use or uses accommodated by a building and its lot, categorized as Limited or Open, according to the intensity of the use. *See Table 3C.*

Gallery: a Private Frontage conventional for retail use where the facade is aligned close to the Frontage Line with an attached cantilevered shed or lightweight colonnade overlapping the Sidewalk. *See Table 3B.*

Green: a Civic Space type for unstructured recreation, spatially defined by landscaping rather than building Frontages. *See Table 2F.*

Home Occupation: an occupation or profession which is customarily conducted on or in a residential structure or property. *See Section 3.4 and Table 3C and Table 3D.*

Initial Lumens: a measure of how much light a lamp is emitting near the beginning of its life.

Inn: a Lodging type, owner-occupied, offering 6 to 12 bedrooms, allowed to serve meals to guests. *See Table 3C and Table 3D.*

Lamp: The source of illumination in a lighting fixture.

Light Manufacturing: a business manufacturing, assembling, or storing products where there is no exterior impact of the manufacturing use, including no exterior noise, odors, or air pollution. (Syn: Maker Space; Var: innovation works)

Light Shelf: a horizontal overhang placed in a window above eye level, which reflects daylight onto the ceiling and deeper into a room. The overhang of the shelf also provides shade near the window to reduce window glare.

Lightwell: A Private Frontage type that is a below-grade entrance or recess designed to allow light into basements. *See Table 3B.* (Syn: light court.)

Liner Building: a building specifically designed to mask a parking lot or a parking structure from a frontage.

Live-Work: a mixed use unit consisting of a Commercial and Residential Function. The Commercial Function may be anywhere in the unit. It is intended to be occupied by a business operator who lives in the same structure that contains the Commercial activity.

Lodging: premises available for daily and weekly renting of bedrooms. *See Table 3C and Table 3D.*

Loft Building: a large flexible-use building type, either a renovated industrial building or new. It has high ceilings on all stories and open living or working space on upper stories, whether rental apartments, condominiums, offices, classrooms, art/craft studios, or Light Manufacturing.

Lot: a parcel of land accommodating a building or buildings of unified design.

Lot Layer: a range of depth of a lot in which certain elements are allowed. *See Definitions Illustrated.*

Lot Line: the boundary that legally and geometrically demarcates a lot.

Lot Width: the measurement of the Principal Frontage Line of a lot.

Lumen: a measure of brightness.

Luminaire: a light unit or fixture including any bulb(s), tube(s), housing, reflective shield, lens and/or ballast.

MX Zone: Mixed Zone, one of two areas on the Zoning Map regulated by this Code. MX Zones are administratively similar to the land use zones in conventional codes, except that in addition to the usual building use, height, and setback requirements, other elements of the intended habitat are integrated, including those of the private lot and building and Public Frontage. *See Table 1A.*

Main Civic Space: the primary outdoor gathering place for a neighborhood. The Main Civic Space is often, but not always, associated with an important Civic Building.

Maker Space: see Light Manufacturing.

Mansard Roof: a four-sided roof characterized by two slopes on each of its sides with the lower slope at a steeper angle than the upper.

Meeting Hall: a building available for gatherings, including conferences.

Mini-Storage: A building or group of buildings containing separate, individual, and private storage spaces of varying sizes available for lease or rent for varying periods of time.

Mixed Use: multiple Functions within the same building through superimposition or adjacency, or in multiple buildings by adjacency, or at a proximity determined by Special Permit.

Mullion: vertical or horizontal member of a window frame, not including **Muntins**

Multi-family Dwellings: three or more dwelling units in single or multiple buildings on a single lot.

Muntin: one of the strips dividing the individual panes of a window.

Native Species: a plant species that existed, without human involvement, in North America prior to European settlement, with proven adaptability to local bioregion climate and soil conditions in the past few thousand years.

Neighborhood: a compact land area for dwelling, also containing within walking distance many destinations, goods, and services useful for daily living. *See Chapter 2.*

Net Site Area: all developable land within a site including thoroughfares, but excluding land allocated as Civic Zones and land already preserved.

Office: premises available for the transaction of general business but excluding retail, artisanal and manufacturing uses. *See Table 3C and Table 3D.*

Open Space: land intended to remain undeveloped or adapted as Civic Space.

Outbuilding: an Accessory Building, usually located toward the rear of the same lot as a Principal Building, and sometimes connected to the Principal Building by a Backbuilding. *See Definitions Illustrated.*

Park: A Civic Space that is a natural preserve available for unstructured recreation. See *Table 2F*.

Parking Structure: a building containing one or more stories of parking above or below grade.

Participating Parcel: an application for a land area smaller than a full Neighborhood that contributes to the MX Zone allocation percentages of that Neighborhood. *See Section 2.5.*

Passage (PS): a pedestrian connector, open or roofed, that passes between buildings to provide shortcuts through long blocks and connect rear parking areas to frontages.

Path (PT): a pedestrian way traversing a civic space or rural area.

Planter: the flush or raised element of the Public Frontage that accommodates trees, plants, shrubs, or flowers, whether continuous or individual.

Plaza: a Civic Space type designed for Civic purposes and Commercial activities, generally paved and spatially defined by building frontages. *See Table 2F.*

Principal Building: the main building on a lot, usually located toward the frontage. *See Definitions Illustrated.*

Principal Entrance: the main point of access for pedestrians into a building.

Principal Frontage: On corner lots, the Private Frontage designated to bear the address and Principal Entrance to the building, and the measure of lot width. Regulations for the parking Lot Layers pertain only to the Principal Frontage. Regulations for the first Lot Layer pertain to both frontages of a corner lot. See **Frontage.**

Private Frontage: the privately held Lot Layer between the Frontage Line and the Principal Building facade. *See Table 3B and Definitions Illustrated.*

Public Frontage: the area between the outer edge of the Vehicular Lanes and the Frontage Line. *See Table 2D, Table 2E, and Definitions Illustrated.*

Rear Alley (RA): a vehicular way located to the rear of lots providing access to service areas, parking, and Outbuildings and containing utility easements.

Recess Line: a horizontal line required for the full width of a Façade, above which there is a Stepback of a minimum distance, such that the height to this line (not the overall building height) effectively defines the enclosure of the enfronting public space. *See Table 3A.*

Regulating Plan: a Zoning Map or set of maps that shows the areas subject to, or potentially subject to, regulation by this Code.

Residential: characterizing premises available for long-term human dwelling.

Retail: characterizing a business establishment available for the sale of merchandise or food service to the public. *See Table 3C and Table 3D.*

Retail Frontage: a Frontage designated on a Regulating Plan that requires or recommends the provision of a Shopfront, encouraging the ground level to be available for Retail use. *See Section 3.10.*

Retrofit: design and/or construction that changes single-use areas or automobile-oriented thoroughfares and frontages to a more walkable pattern that supports the standards and Intent and Purpose of this Code.

Rowhouse: a single-family dwelling that shares a party wall with another of the same type and occupies the full Frontage Line. See **Attached Building**. (Syn: **Townhouse)**

Secondary Frontage: on corner lots, the Private Frontage that is not the Principal Frontage. As it affects the public realm, its first Lot Layer is regulated. *See Definitions Illustrated.*

Shielded: characterizing a Luminaire that limits light trespass beyond the property line, and prevents the lamp from being directly visible.

Shopfront: a Private Frontage conventional for Retail use, with substantial glazing, wherein the facade is aligned close to the Frontage Line with the building entrance at sidewalk grade. *See Table 3B.*

Side Street: a street without Principal Frontages.

Sidewalk: the paved section of the Public Frontage dedicated exclusively to pedestrian activity.

Special Permit: a permit for a use or form that would not be appropriate in, or requires specific approval for, the MX Zone for which it is proposed. *See Section 1.5 of this Code.*

Special Requirement: any of the provisions listed at Section 2.9 or Section 3.10 and/or its associated designation on a Regulating Plan or other map.

Square: a Civic Space type designed for unstructured recreation and Civic or Commercial purposes, spatially defined by building frontages and consisting of paths, lawns and trees, formally disposed. *See Table 2F.*

Stepback: a building setback of a specified distance that occurs at a required number of stories above the ground. *See Table 3A.*

Stoop: a Private Frontage where the Facade is aligned close to the Frontage Line with the first story elevated from the sidewalk for privacy, with an exterior stair and landing at the entrance. *See Table 3B.*

Story: a habitable level within a building, excluding a raised basement. *See Table 3A.*

Street (ST): a local thoroughfare of low speed and capacity. *See Appendix A.*

Streetscreen: a freestanding wall built along the Frontage Line, or coplanar with the facade. It may mask a parking lot from the thoroughfare, provide privacy to a side yard, and/or strengthen the spatial definition of the public realm. (Syn: streetwall.)

Swale: a low or slightly depressed natural area for drainage.

TDR: Transfer of Development Rights, a method of relocating existing zoning rights from areas to be preserved as open space to areas to be more densely developed.

Thoroughfare: a way for use by vehicular and pedestrian traffic and to provide access to lots and open spaces, consisting of Vehicular Lanes and the Public Frontage. *See Section 2.6 and Definitions Illustrated.*

Townhouse: See **Rowhouse**.

Tuck Under Parking: carports located underneath an upper floor**.**

Turning Radius: the curved edge of a thoroughfare at an intersection, measured at the inside edge of the vehicular tracking. The smaller the Turning Radius, the smaller the pedestrian crossing distance and the more slowly the vehicle is forced to make the turn. *See Table 2B and Definitions Illustrated.*

Vehicular Lanes: lanes in the roadbed intended for vehicular traffic and bicycles, whether traveling or parked. *See Table 2B and Table 2C.*

View Corridor: three-dimensional area extending out from a viewpoint.

Visual Termination: (1) a building, structure, or other surface or streetscape element terminating a view; (2) the placement of a building or structure for the purpose of spatial enclosure, providing a visual focal point, or giving enhanced recognition to the building or structure by such placement. (Syn: terminated vista.)

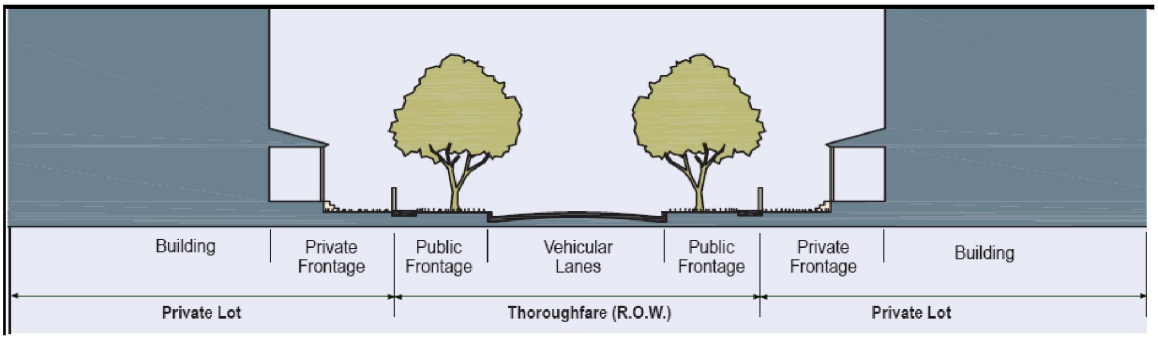
Warehouse: a building used primarily for the storage of goods and materials.

Yield: characterizing a thoroughfare that has two-way traffic but only one effective travel lane because of parked cars, necessitating slow movement and driver negotiation. Also, characterizing parking on such a thoroughfare.

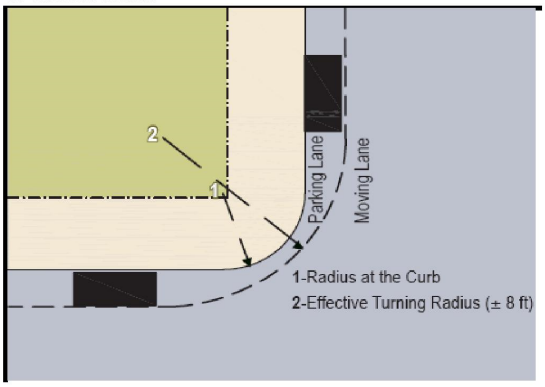
Zoning Map: the official map or maps that are part of the zoning regulation and delineate the boundaries of individual zones and districts. See **Regulating Plan**.

DEFINITIONS ILLUSTRATED

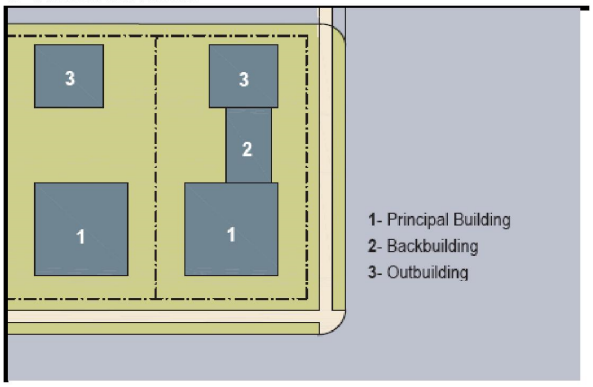
a. THOROUGHFARE & FRONTAGES



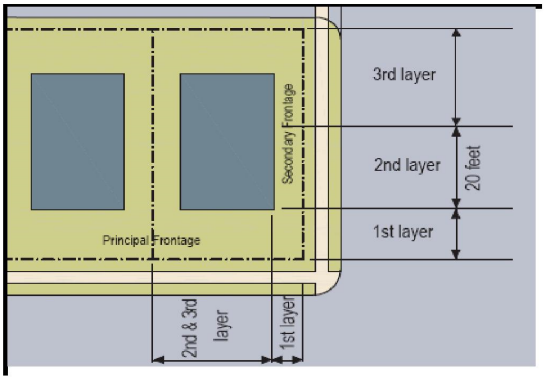
b. TURNING RADIUS



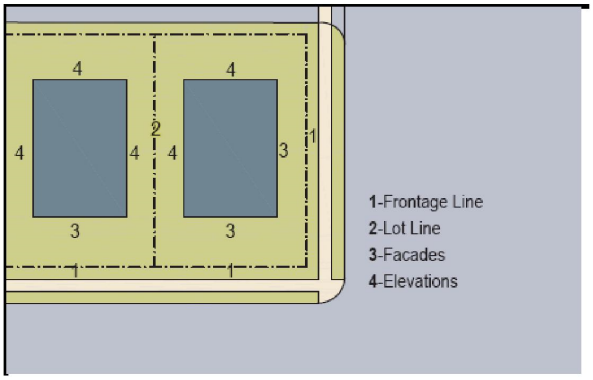
c. BUILDING DISPOSITION



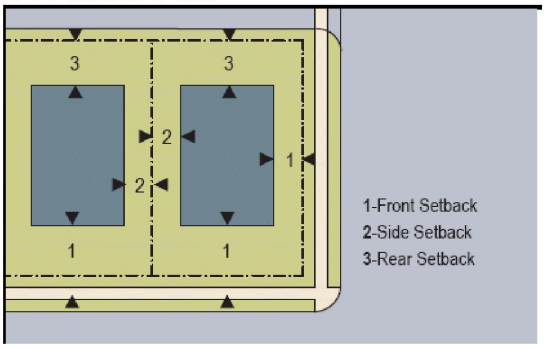
d. LOT LAYERS



e. FRONTAGE & LOT LINES



f. SETBACK DESIGNATIONS

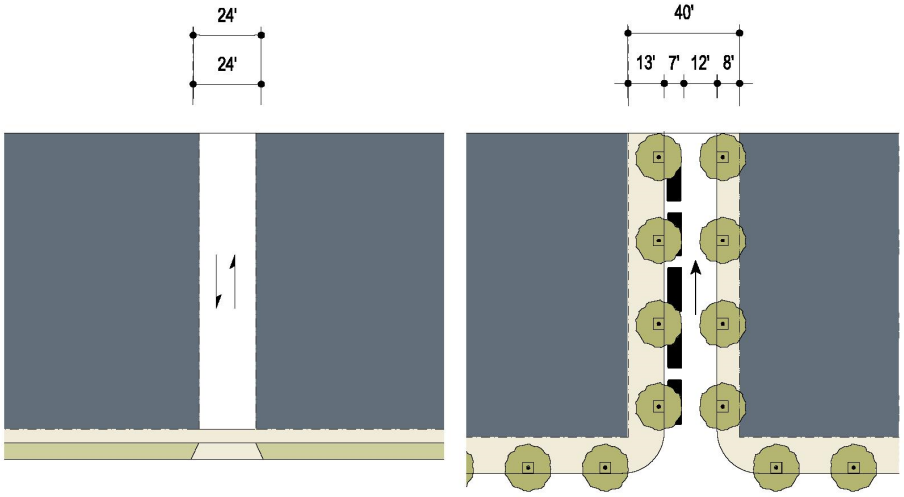


APPENDICES

APPENDIX A1. THOROUGHFARE ASSEMBLIES

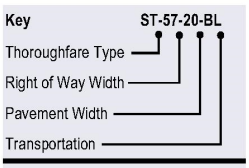
Key	ST-57-20-BL
Thoroughfare Type	
Right of Way Width	
Pavement Width	
Transportation	

Thoroughfare Types	
Highway	HW
Boulevard	BV
Avenue	AV
Commercial Street	CS
Drive	DR
Street	ST
Road	RD
Rear Alley	RA
Rear Lane	RL
Bicycle Trail	BT
Bicylce Lane	BL
Bicycle Route	BR
Path	PT
Passage	PS
Transit Route	TR

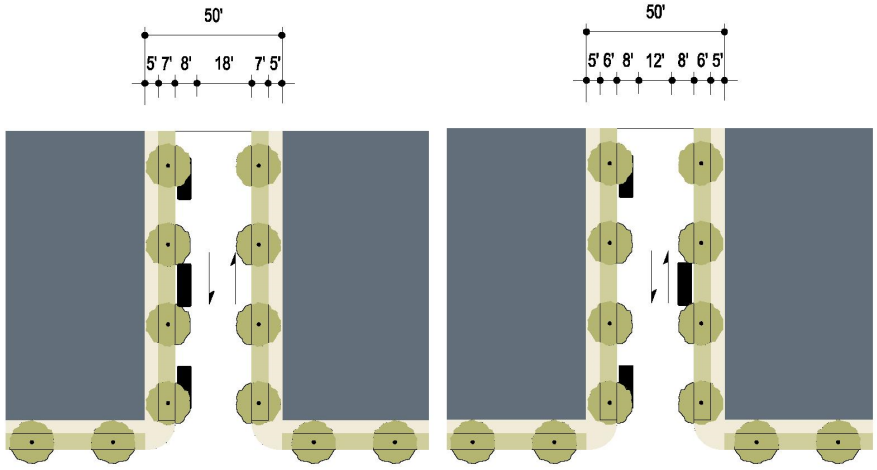


	RA-24-24	ST-40-19
Thoroughfare Type	Rear Alley	Street
Zone Assignment	MX1, MX2	MX1, MX2
Right-of-Way Width	24 feet	40 feet
Pavement Width	24 feet	19 feet
Movement	Slow Movement	Slow Movement
Design Speed	10 MPH	20 MPH
Pedestrian Crossing Time	7 seconds	5.4 seconds
Traffic Lanes	n/a	1 lane
Parking Lanes	None	One side @ 7 feet marked
Curb Radius	Taper	15 feet
Walkway Type	None	13/8 foot Sidewalk
Planter Type	None	4x4'' tree well
Curb Type	Inverted Crown	Curb
Landscape Type	None	Trees at 30' o.c. Avg.
Transportation Provision	None	see Appendix B – Bicycling Assemblies

APPENDIX A1. THOROUGHFARE ASSEMBLIES (cont)



Thoroughfare Types	
Highway	HW
Boulevard	BV
Avenue	AV
Commercial Street	CS
Drive	DR
Street	ST
Road	RD
Rear Alley	RA
Rear Lane	RL
Bicycle Trail	BT
Bicylce Lane	BL
Bicycle Route	BR
Path	PT
Passage	PS
Transit Route	TR



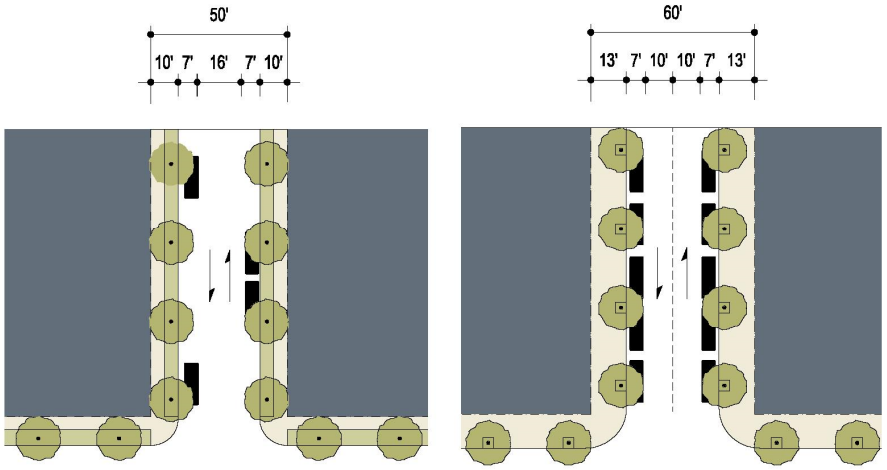
	ST-50-26	ST-50-28
Thoroughfare Type	Street	Street
Zone Assignment	MX1, MX2	MX1, MX2
Right-of-Way Width	50 feet	50 feet
Pavement Width	26 feet	28 feet
Movement	Free Movement	Yield Movement
Design Speed	20 MPH	20 MPH
Pedestrian Crossing Time	7.4 seconds	7.6 seconds
Traffic Lanes	2 lanes	2 lane
Parking Lanes	One side @ 8 feet marked	Both sides @ 8 feet unmarked
Curb Radius	10 feet	10 feet
Walkway Type	5 foot Sidewalk	5 foot Sidewalk
Planter Type	7 foot continuous Planter	6 foot continuous Planter
Curb Type	Curb	Curb
Landscape Type	Trees at 30' o.c. Avg.	Trees at 30' o.c. Avg.
Transportation Provision	see Appendix B – Bicycling Assemblies	see Appendix B – Bicycling Assemblies

APPENDIX A1. THOROUGHFARE ASSEMBLIES (cont)

Key **ST-57-20-BL**

Thoroughfare Type
Right of Way Width
Pavement Width
Transportation

Thoroughfare Types	
Highway	HW
Boulevard	BV
Avenue	AV
Commercial Street	CS
Drive	DR
Street	ST
Road	RD
Rear Alley	RA
Rear Lane	RL
Bicycle Trail	BT
Bicylce Lane	BL
Bicycle Route	BR
Path	PT
Passage	PS
Transit Route	TR

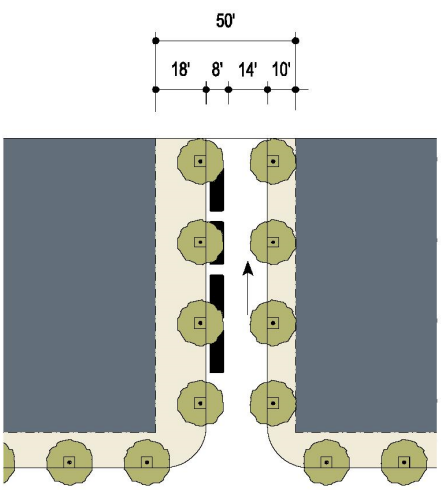


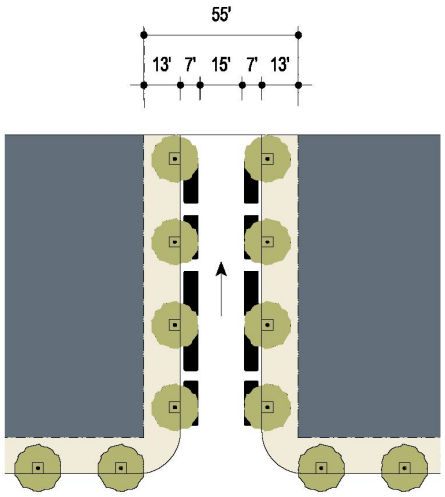
	ST-50-30	ST-60-34
Thoroughfare Type	Street	Street
Zone Assignment	MX1	MX1, MX2
Right-of-Way Width	50 feet	60 feet
Pavement Width	30 feet	34 feet
Movement	Slow Movement	Slow Movement
Design Speed	20 MPH	20 MPH
Pedestrian Crossing Time	8.5 seconds	9.7 seconds
Traffic Lanes	2 lanes	2 lanes
Parking Lanes	Both sides @ 7 feet unmarked	Both Sides @ 7 feet marked
Curb Radius	10 feet	15 feet
Walkway Type	5 foot Sidewalk	6 foot Sidewalk
Planter Type	5 foot continuous Planter	7 foot continuous Planter
Curb Type	Curb	Curb
Landscape Type	Trees at 30' o.c. Avg.	Trees at 30' o.c. Avg.
Transportation Provision	see Appendix B – Bicycling Assemblies	see Appendix B – Bicycling Assemblies

APPENDIX A1. THOROUGHFARE ASSEMBLIES (cont)

Key	ST-57-20-BL
Thoroughfare Type	
Right of Way Width	
Pavement Width	
Transportation	

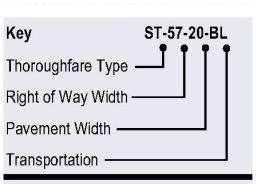
Thoroughfare Types	
Highway	HW
Boulevard	BV
Avenue	AV
Commercial Street	CS
Drive	DR
Street	ST
Road	RD
Rear Alley	RA
Rear Lane	RL
Bicycle Trail	BT
Bicylce Lane	BL
Bicycle Route	BR
Path	PT
Passage	PS
Transit Route	TR



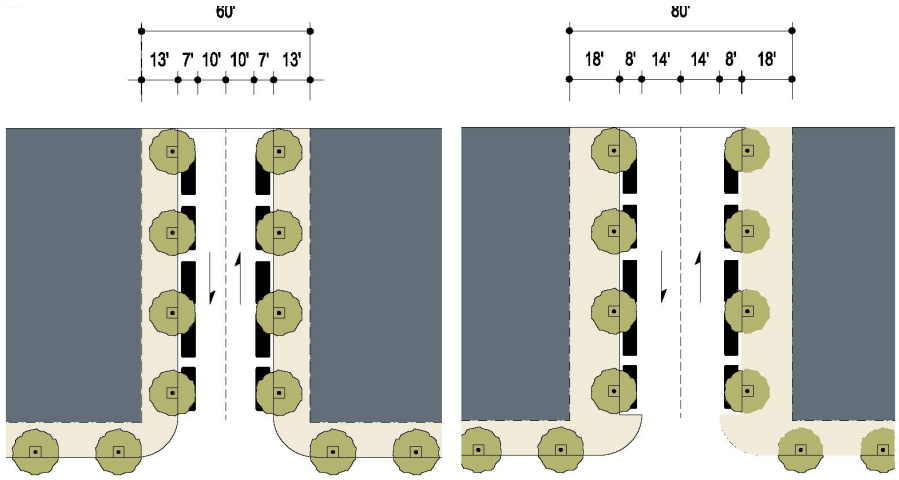


	CS-50-22	CS-55-29
Thoroughfare Type	Commercial Street	Commercial Street
Zone Assignment	MX2	MX2
Right-of-Way Width	50 feet	55 feet
Pavement Width	22 feet	29 feet
Movement	Slow Movement	Slow Movement
Design Speed	20 MPH	20 MPH
Pedestrian Crossing Time	6.2 seconds	8.2 seconds
Traffic Lanes	1 lane	1 lane
Parking Lanes	One side @ 8 feet marked	Both sides @ 7 feet marked
Curb Radius	15 feet	15 feet
Walkway Type	18/10 foot Sidewalk	13 foot Sidewalk
Planter Type	4x4" tree well	4x4" tree well
Curb Type	Curb	Curb
Landscape Type	Trees at 30' o.c. Avg.	Trees at 30' o.c. Avg.
Transportation Provision	see Appendix B – Bicycling Assemblies	see Appendix B – Bicycling Assemblies

APPENDIX A1. THOROUGHFARE ASSEMBLIES (cont)

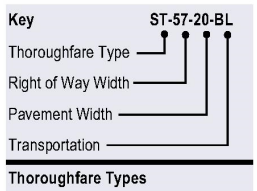


Thoroughfare Types	
Highway	HW
Boulevard	BV
Avenue	AV
Commercial Street	CS
Drive	DR
Street	ST
Road	RD
Rear Alley	RA
Rear Lane	RL
Bicycle Trail	BT
Bicylce Lane	BL
Bicycle Route	BR
Path	PT
Passage	PS
Transit Route	TR

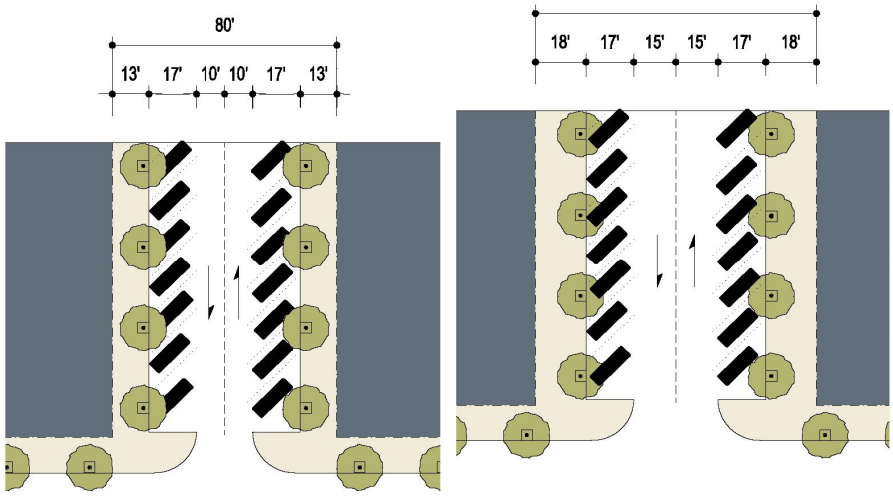


	CS-60-34	CS-80-44
Thoroughfare Type	Commercial Street	Commercial Street
Zone Assignment	MX2	MX2
Right-of-Way Width	60 feet	80 feet
Pavement Width	34 feet	44 feet
Movement	Slow Movement	Free Movement
Design Speed	20 MPH	25 MPH
Pedestrian Crossing Time	9.7 seconds	8 seconds at corners
Traffic Lanes	2 lanes	2 lanes
Parking Lanes	Both sides @ 7 feet marked	Both sides @ 8 feet marked
Curb Radius	10 feet	10 feet
Walkway Type	13 foot Sidewalk	18 foot Sidewalk
Planter Type	4x4" tree well	4x4" tree well
Curb Type	Curb	Curb
Landscape Type	Trees at 30' o.c. Avg.	Trees at 30' o.c. Avg.
Transportation Provision	see Appendix B – Bicycling Assemblies	see Appendix B – Bicycling Assemblies

APPENDIX A1. THOROUGHFARE ASSEMBLIES (cont)



Thoroughfare Types	
Highway	HW
Boulevard	BV
Avenue	AV
Commercial Street	CS
Drive	DR
Street	ST
Road	RD
Rear Alley	RA
Rear Lane	RL
Bicycle Trail	BT
Bicylce Lane	BL
Bicycle Route	BR
Path	PT
Passage	PS
Transit Route	TR

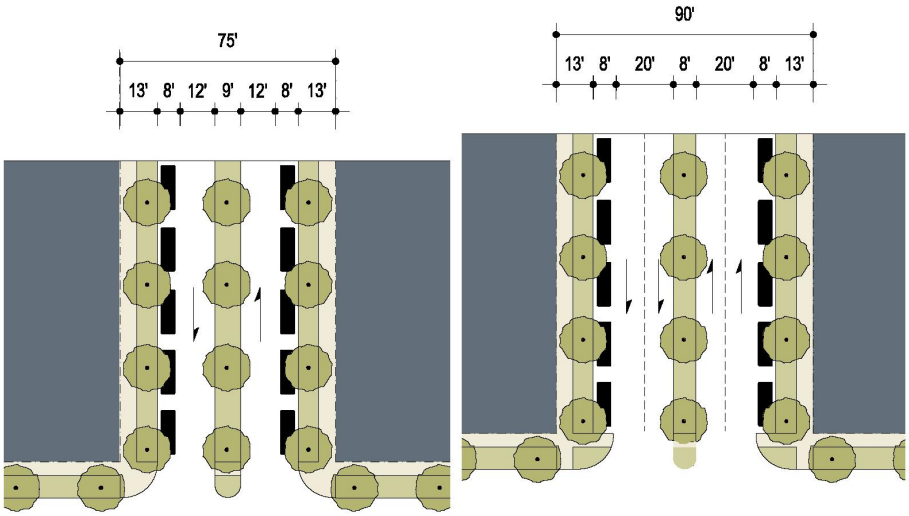


	CS-80-54	CS-100-64
Thoroughfare Type	Commercial Street	Commercial Street
Zone Assignment	MX2	MX2
Right-of-Way Width	80 feet	100 feet
Pavement Width	54 feet	64 feet
Movement	Slow Movement	Slow Movement
Design Speed	25 MPH	25 MPH
Pedestrian Crossing Time	5.7 seconds at corners	8.5 seconds at corners
Traffic Lanes	2 lanes	2 lanes
Parking Lanes	Both sides angled @ 17 feet marked	Both sides angled @ 17 feet marked
Curb Radius	10 feet	10 feet
Walkway Type	13 foot Sidewalk	18 foot Sidewalk
Planter Type	4X4' tree well	4X4' tree well
Curb Type	Curb	Curb
Landscape Type	Trees at 30' o.c. Avg.	Trees at 30' o.c. Avg.
Transportation Provision	see Appendix B – Bicycling Assemblies	see Appendix B – Bicycling Assemblies

APPENDIX A1. THOROUGHFARE ASSEMBLIES (cont)

Key	ST-57-20-BL
Thoroughfare Type	
Right of Way Width	
Pavement Width	
Transportation	

Thoroughfare Types	
Highway	HW
Boulevard	BV
Avenue	AV
Commercial Street	CS
Drive	DR
Street	ST
Road	RD
Rear Alley	RA
Rear Lane	RL
Bicycle Trail	BT
Bicylce Lane	BL
Bicycle Route	BR
Path	PT
Passage	PS
Transit Route	TR

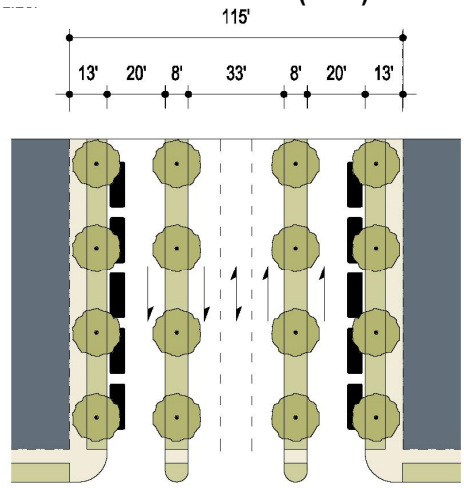


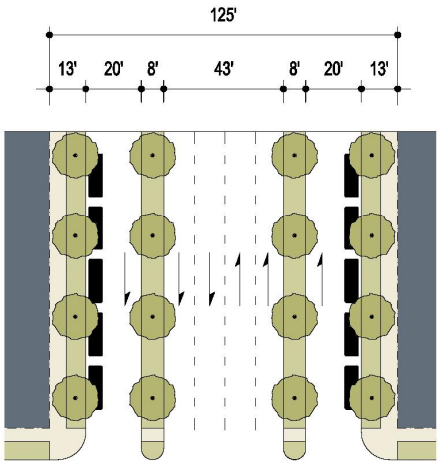
	AV-75-40	AV-90-56
Thoroughfare Type	Avenue	Avenue
Zone Assignment	MX1, MX2	MX1, MX2
Right-of-Way Width	75 feet	90 feet
Pavement Width	40 feet total	56 feet total
Movement	Slow Movement	Slow Movement
Design Speed	25 MPH	25 MPH
Pedestrian Crossing Time	5.7 seconds - 5.7 seconds	5.7 seconds - 5.7 seconds at corners
Traffic Lanes	2 lanes	4 lanes
Parking Lanes	Both sides @ 8 feet marked	Both sides @ 8 feet marked
Curb Radius	10 feet	10 feet
Walkway Type	6 foot Sidewalk	6 foot Sidewalk
Planter Type	7 foot continuous Planter	7 foot continuous Planter
Curb Type	Curb or Swale	Curb or Swale
Landscape Type	Trees at 30' o.c. Avg.	Trees at 30' o.c. Avg.
Transportation Provision	see Appendix B – Bicycling Assemblies	see Appendix B – Bicycling Assemblies

APPENDIX A1. THOROUGHFARE ASSEMBLIES (cont)

Key	ST-57-20-BL
Thoroughfare Type	
Right of Way Width	
Pavement Width	
Transportation	

Thoroughfare Types	
Highway	HW
Boulevard	BV
Avenue	AV
Commercial Street	CS
Drive	DR
Street	ST
Road	RD
Rear Alley	RA
Rear Lane	RL
Bicycle Trail	BT
Bicylce Lane	BL
Bicycle Route	BR
Path	PT
Passage	PS
Transit Route	TR





	BV-115-33	BV-125-43
Thoroughfare Type	Boulevard	Boulevard
Zone Assignment	MX2	MX2
Right-of-Way Width	115 feet	125 feet
Pavement Width	20 feet - 33 feet - 20 feet	20 feet - 43 feet - 20 feet
Movement	Free Movement (inner lanes)	Free Movement (inner lanes)
Design Speed	25 MPH	25 MPH
Pedestrian Crossing Time	5.7 seconds - 9.4 seconds - 5.7 seconds	5.7 seconds - 12.2 seconds - 5.7 seconds
Traffic Lanes	3 lanes, one turning lane & two one-way slip roads	4 lanes & two one-way slip roads
Parking Lanes	8 feet	8 feet
Curb Radius	10 feet	10 feet
Walkway Type	6 foot Sidewalk	6 foot Sidewalk
Planter Type	7 foot continuous Planter	7 foot continuous Planter
Curb Type	Curb	Curb
Landscape Type	Trees at 30' o.c. Avg.	Trees at 30' o.c. Avg.
Transportation Provision	see Appendix B – Bicycling Assemblies	see Appendix B – Bicycling Assemblies

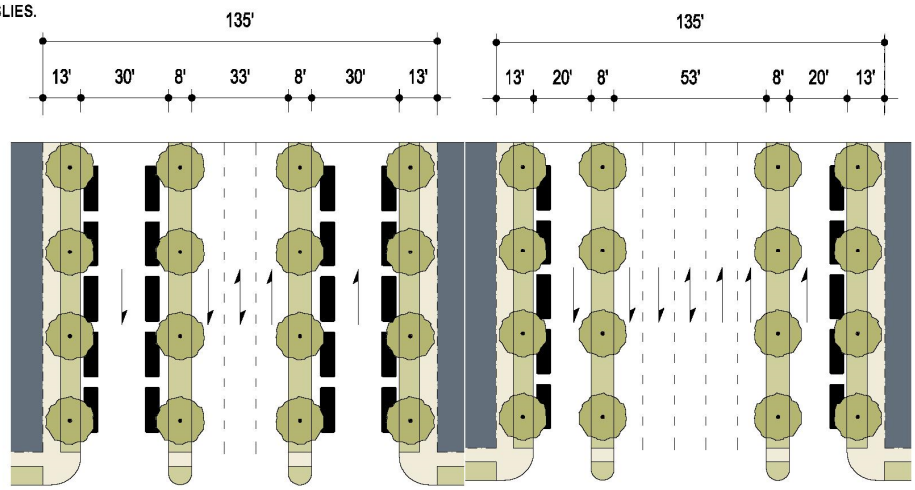
APPENDIX A1. THOROUGHFARE ASSEMBLIES (cont)

APPENDIX A - THOROUGHFARE ASSEMBLIES.

Key **ST-57-20-BL**

Thoroughfare Type
Right of Way Width
Pavement Width
Transportation

Thoroughfare Types	
Highway	HW
Boulevard	BV
Avenue	AV
Commercial Street	CS
Drive	DR
Street	ST
Road	RD
Rear Alley	RA
Rear Lane	RL
Bicycle Trail	BT
Bicylce Lane	BL
Bicycle Route	BR
Path	PT
Passage	PS
Transit Route	TR



	BV-135-33	BV-135-53
Thoroughfare Type	Boulevard	Boulevard
Zone Assignment	MX2	MX2
Right-of-Way Width	135 feet	135 feet
Pavement Width	30 feet - 33 feet - 30 feet	20 feet - 53 feet - 20 feet
Movement	Free Movement	Free Movement
Design Speed	25 MPH	25 MPH
Pedestrian Crossing Time	8.5 seconds - 9.4 seconds - 8.5 seconds	5.7 seconds - 15.1 seconds - 5.7 seconds
Traffic Lanes	3 lanes, one turning lane & two one-way slip roads	5 Lanes, one turning lane & two one-way slip roads
Parking Lanes	8 feet	8 feet
Curb Radius	10 feet	10 feet
Walkway Type	6 foot Sidewalk	6 foot Sidewalk
Planter Type	7 foot continuous Planter	7 foot continuous Planter
Curb Type	Curb	Curb
Landscape Type	Trees at 30' o.c. Avg.	Trees at 30' o.c. Avg.
Transportation Provision	see Appendix B – Bicycling Assemblies	see Appendix B – Bicycling Assemblies

APPENDIX A1. RETAIL

THOROUGHFARE	Corner Store	Neighborhood Shops	Main Street	Downtown Shopping District
RA-24-24				
ST-40-19		▪	▪	
ST-50-26	▪	▪		
ST-50-28				
ST-50-30	▪			
ST-60-34	▪	▪		
CS-50-22	▪	▪		
CS-55-29	▪	▪		
CS-60-34		▪	▪	▪
CS-80-44		▪	▪	▪
CS-80-54		▪	▪	
CS-100-64		▪	▪	▪
AV-75-40	▪	▪	▪	
AV-90-56	▪	▪	▪	
BV-115-33	▪	▪	▪	▪
BV-125-43	▪	▪	▪	▪
BV-135-33	▪	▪	▪	▪
BV-135-53	▪	▪	▪	▪

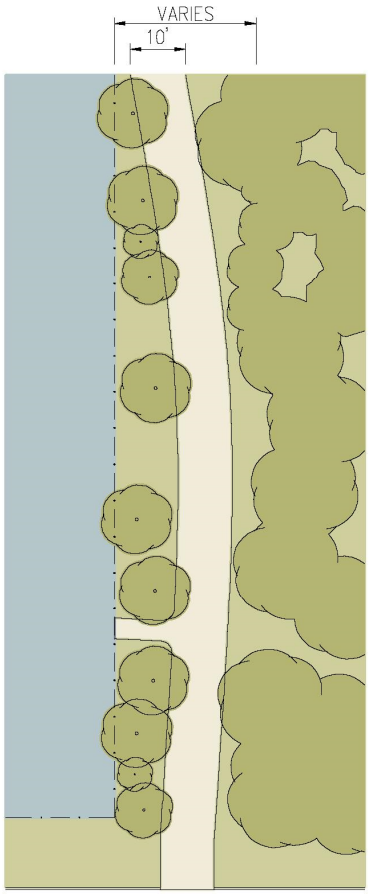
APPENDIX B1. BIKEWAY & FACILITY TYPE SUMMARY

APPENDIX B - Bikeway & Facility Type Summary				
Transit Village Design District				
Additional contexts are shown to help connect bikeways to the region.				
				
	MX1	**Mixed-1 Zone**	**MX2**	**Mixed-2 Zone**
a. Bikeway Types				
Shared Use Bicycle Trail				
Shared Use Bicycle Path	permitted		permitted	
Bicycle Lane (Conventional)	Special Permit		Special Permit	
Shared Vehicular Lanes	permitted		permitted	
b. Bicycle Parking				
Bicycle Rack (standard)	permitted		permitted	
Bicycle Rack (decorative, public art)	Special Permit		permitted	
Bicycle Shelter	permitted		permitted	
Bicycle Locker	Special Permit		permitted	
Bicycle Station			Special Permit	
c. Bikeway Countermeasures				
Safety and Route Signing	permitted		permitted	
Peg-a-Track	permitted		permitted	
Shared Vehicular Lane Marking (Sharrow)	permitted		permitted	
Bicycle Inductor Loop	permitted		permitted	
Physically-Separated Bicycle Lane	Special Permit		Special Permit	
Contra-Flow Bicycle Lane	Special Permit		Special Permit	
Buffered Bicycle Lane	Special Permit		Special Permit	
Bicycle Box	Special Permit		Special Permit	
Shoulder				

APPENDIX B2. BICYCLING THOROUGHFARE ASSEMBLIES

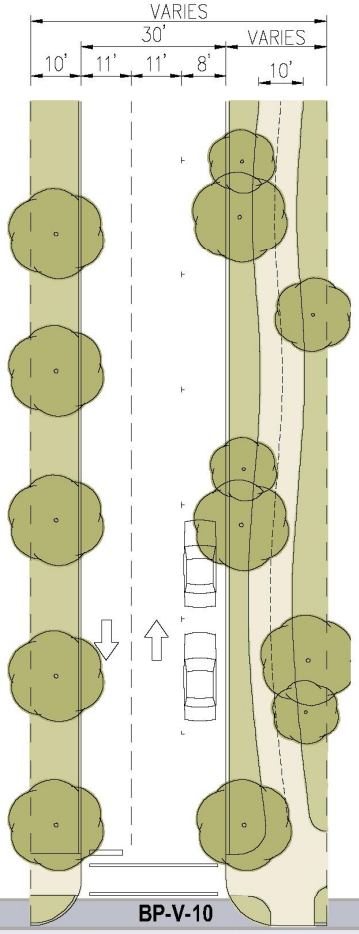
Key	ST-57-20-BL
Thoroughfare Type	
Right of Way Width	
Pavement Width	
Transportation	

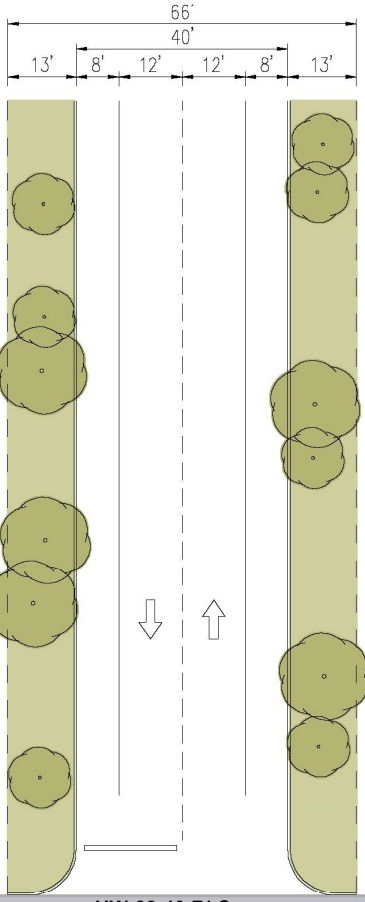
Thoroughfare Types	
Highway	HW
Road	RD
Street	ST
Drive	DR
Avenue	AV
Commercial Street	CS
Boulevard	BV
Rear Alley	RA
Rear Lane	RL
Path	PT
Passage	PS
Bikeway Types	
Bicycle Trail (Shared Use)	BT
Bicycle Path (Shared Use)	BP
Bicycle Lane	BL
Conventional	BLC
Buffered	BLB
Buffered-Two-Way	BLB2
Physically Separated	BLP
Shoulder	BLS
With Bicycle Box	BLX
Shared Vehicular Lane	SL
Bicycle Boulevard	BB



Assembly Designation		**BT-V-10**
Thoroughfare Type		Bicycle Trail (Shared Use)
Right-of-Way Width		varies
Pavement Width		10 feet
Zone Assignment		[rural, suburban, parkland]
Public Frontage		
Drainage Type		Swale
Curb Radius		n/a
Walkway Type		n/a
Planter Type		n/a
Landscape Type		naturalistic
Median Width		n/a
Vehicular Lanes		
Traffic Lane Width		n/a
Parking Lane Width		n/a
Target Speed		n/a
Pedestrian Crossing Time		n/a
Bikeway Type		**BT - Bicycle Trail (Shared Use)**
Riding Surface Width		10 feet
Movement		dual direction
Intersection Treatment		signed
Bicycle Parking		rack, Bicycle Shelter

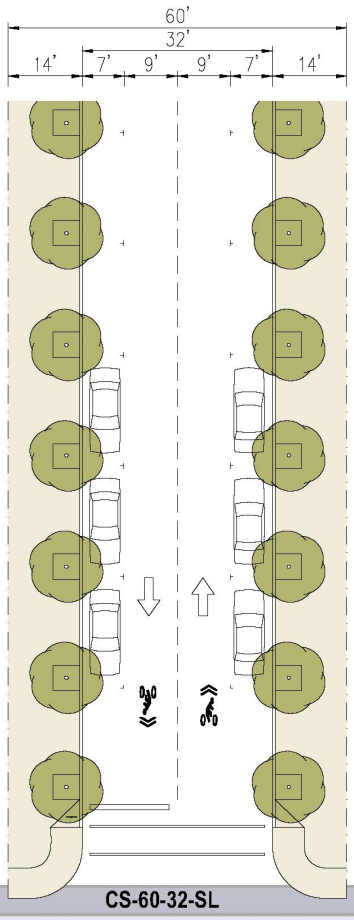
APPENDIX B2. BICYCLING THOROUGHFARE ASSEMBLIES (cont)

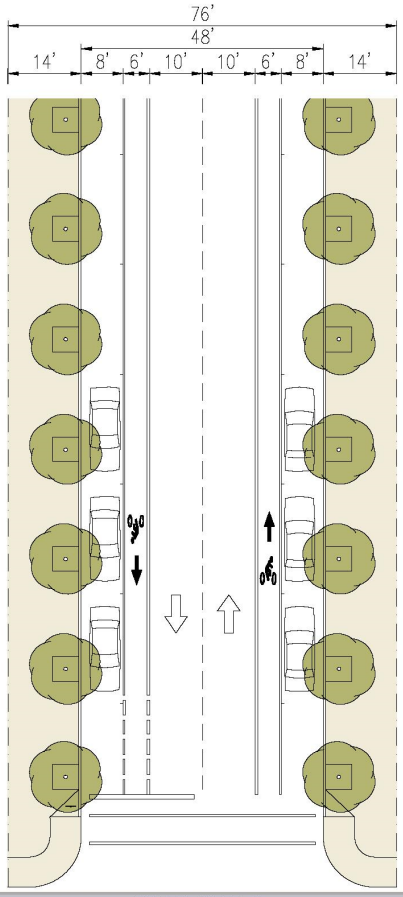




BP-V-10	HW-66-40-BLS
Bicycle Path (Shared Use)	Highway with Shoulder
varies	66 feet
10 feet	40 feet
[suburban], MX1, MX2	[rural, parkland]
Swale, Curb	Swale
n/a	15 feet
n/a	n/a
n/a	13 foot continuous Swale
naturalistic, planted	naturalistic
n/a	n/a
11 feet	12 feet
one side @8 feet marked	n/a
n/a	over 35 mph
n/a	12 seconds
BP - Bicycle Path (Shared Use)	**BLS - Bicycle Lane / Shoulder**
10 feet	8 feet
dual direction	with traffic
signed, signalized	signed, signalized
rack, Bicycle Shelter, Bicycle Locker	opportunistic, rack, Bicycle Shelter

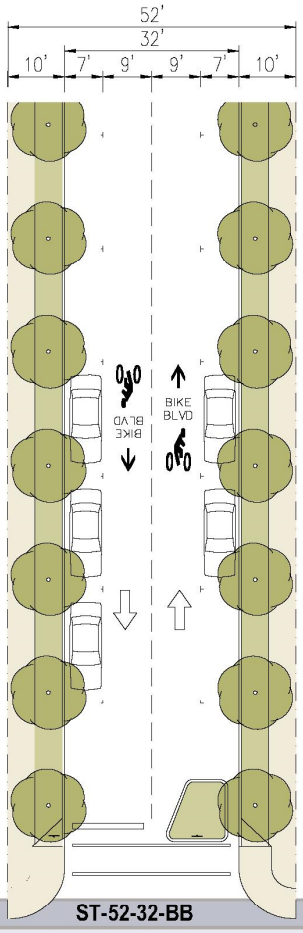
APPENDIX B2. BICYCLING THOROUGHFARE ASSEMBLIES (cont)

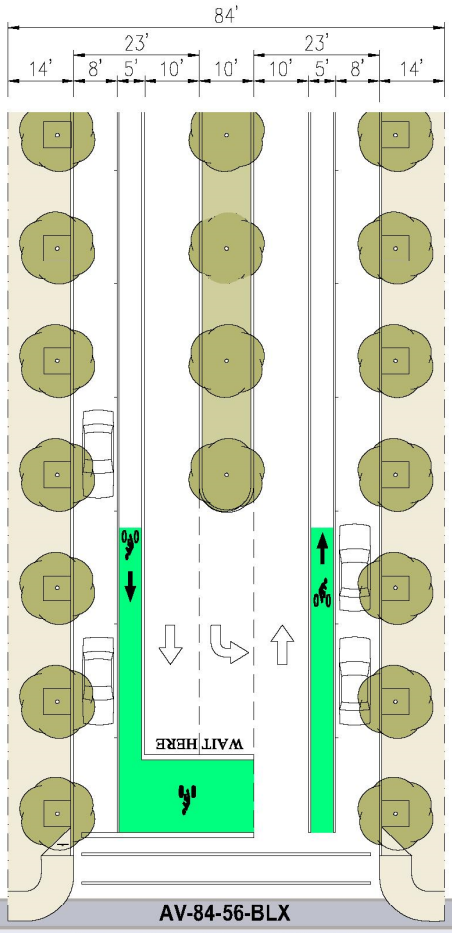




CS-60-32-SL	CS-76-48-BLC
Commercial Street w/ Shared Lane Marking (Sharrow)	Commercial Street with Conventional Bicycle Lane
60 feet	76 feet
32 feet	48 feet
[suburban], MX1, MX2	(retrofit) [suburban], MX1, MX2
4" raised Curb	4" raised Curb
10 feet	10 feet
14 foot Sidewalk both sides	14 foot Sidewalk both sides
6 foot tree wells	4 foot tree well
trees at 30' o.c. avg.	trees at 30' o.c. avg.
n/a	n/a
9 feet	10 feet
both sides @ 7 feet marked	both sides @ 8 feet
25 mph	30 mph
10 seconds	13 seconds
SL - Shared Vehicular Lane (Sharrow)	**BL - Bicycle Lane**
9 feet	6 feet
with traffic	with traffic
signed, signalized, Bicycle Inductor Loops	signed, signalized, dashed, Peg-a-Trak, colored
rack, Bicycle Shelter	rack, Bicycle Shelter, Bicycle Locker, Bicycle Station

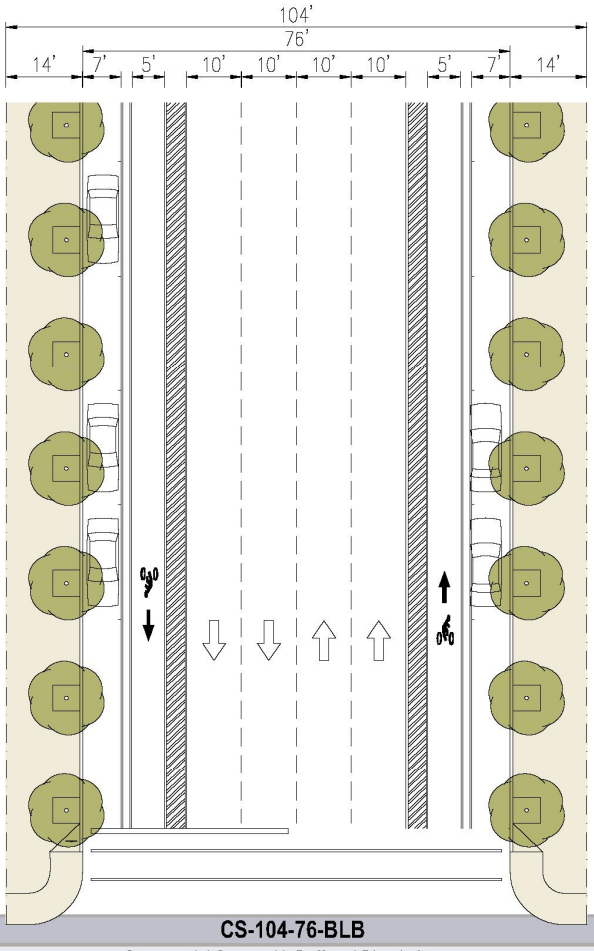
APPENDIX B2. BICYCLING THOROUGHFARE ASSEMBLIES (cont)





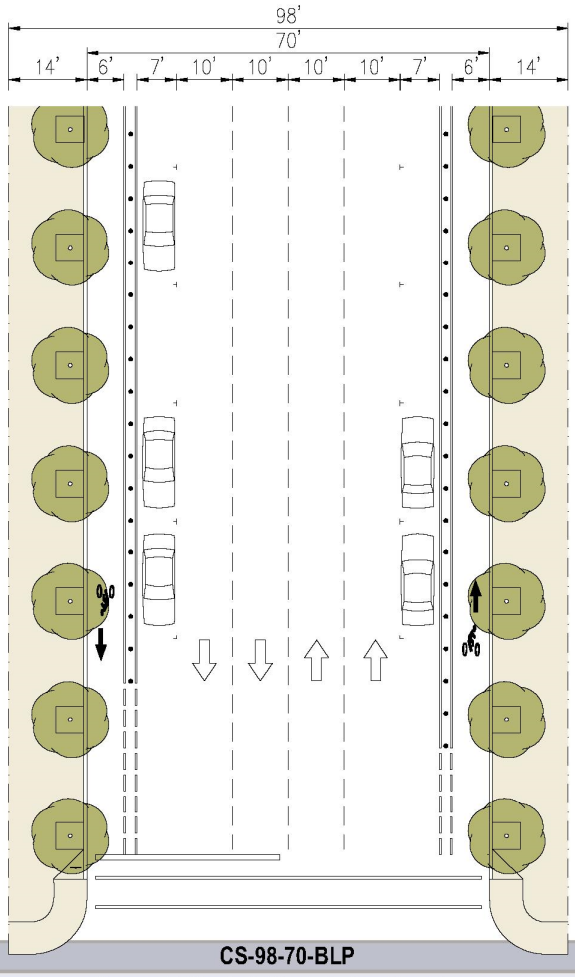
ST-52-32-BB	AV-84-56-BLX
Street as Bicycle Boulevard	Avenue with Bicycle Lane with Bicycle Box
52 feet	84 feet
32 feet	56 feet
(retrofit) [suburban], MX1	(retrofit) [suburban], MX1, MX2
4" raised Curb	4" raised Curb
10 feet	10 feet.
5 foot Sidewalk both sides	14 foot Sidewalk both sides
5 foot continuous planter	6 foot tree wells
trees at 30' o.c. avg.	trees at 30' o.c. avg.
n/a	10 feet.
9 feet	10 feet, turn lane10 feet
both sides @ 7 feet marked	both sides @ 8 feet marked
20 mph	35 mph
10 seconds	16 seconds
BB - Bicycle Boulevard	**BLX - Bicycle Lane with Bicycle Box**
9 feet	5 feet with 14' deep box
with traffic	with traffic
signed, signalized, Bicycle Inductor Loops, Diverter	signalized, Bicycle Box
rack, Bicycle Shelter	rack, Bicycle Shelter, Bicycle Locker, Bicycle Station

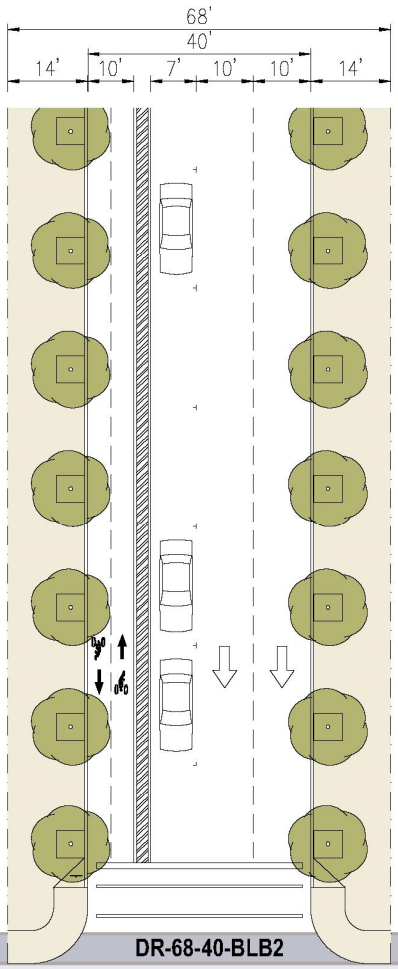
APPENDIX B2. BICYCLING THOROUGHFARE ASSEMBLIES (cont)



CS-104-76-BLB
Commercial Street with Buffered Bicycle Lanes
104 feet
76 feet
(retrofit) MX2
4" raised Curb
10 feet
14 foot Sidewalk both sides
6 foot tree wells
tree wells 30' o.c. avg.
n/a
10 feet
both sides @ 7 feet marked
above 35 mph
24 seconds
BLB - Buffered Bicycle Lane
5 feet with 4' striped buffer and 2' Shy Zone
with traffic
signalized, Peg-a-Track, colored, Bicycle Box, Bicycle Inductor Loops
rack, Bicycle Shelter, Bicycle Locker, Bicycle Station

APPENDIX B2. BICYCLING THOROUGHFARE ASSEMBLIES (cont)





CS-98-70-BLP	DR-68-40-BLB2
Commercial Street with Physically-Sep. Bicycle Lane	Drive with 2-Way Buffered Bicycle Lane
98 feet	68 feet
70 feet	40 feet
(retrofit) MX2	(retrofit) MX1, MX2
4" raised Curb	4" raised Curb
10 feet.	10 feet
14 foot Sidewalk both sides	14 foot Sidewalk both sides
6 foot tree wells	6 foot tree wells
trees at 30' o.c. avg.	tree wells 30' o.c. avg
n/a	n/a
10 feet	10 feet
both sides @ 7 feet marked	one side @ 7 feet marked
35 mph	30 mph
20 seconds	12 seconds
BLP - Physically-Separated Bicycle Lane (Cycle Track)	**BLB2 - Two-Way Buffered Bicycle Lane**
6 feet with 2 ft barrier	5 feet each way with 3 ft striped buffer
with traffic	dual direction
signalized, Peg-a-Track, colored	signalized, Peg-a-Track, colored,Bicycle Box, Bicycle Inductor Loops
rack, Bicycle Shelter, Bicycle Locker, Bicycle Station	rack, Bicycle Shelter, Bicycle Locker, Bicycle Station

APPENDIX B3. BICYCLING PARKING REQUIREMENTS

Appendix B Table B3: Bicycle Parking Requirements - This table prescribes minimum parking ratios within each MX Zone and assumes a bicycle mode share of 5% or less. Requirements may be met within the building, Private Frontage, Public Frontage, or a combination thereof.

SHORT TERM PARKING

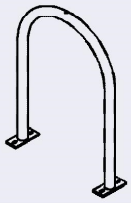
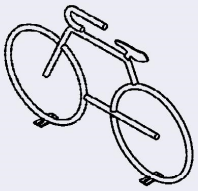
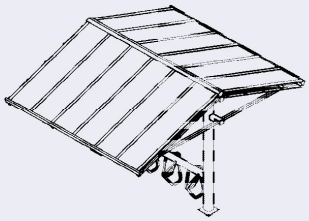
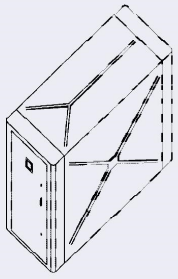
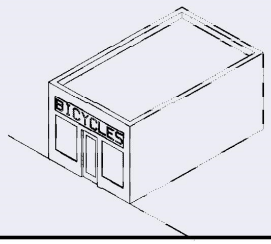
	MX1	MX2
RESIDENTIAL		
Multi-Family	Min. 2.0 spaces .05 spaces / bedroom	Min. 2.0 spaces .10 spaces / bedroom
OFFICE	Min. 2.0 spaces 1.0 / add. 20,000 sq. ft.	Min. 2.0 spaces 1.0 / add.15,000 sq. ft.
RETAIL	Min. 2.0 spaces 1.0 / add. 5,000 sq. ft.	Min. 2.0 spaces 1.0 / add. 5,000 sq. ft.
Other Commercial	by Special Permit	by Special Permit
CIVIC		
Non-Assembly	Min. 2.0 spaces 1.0 / add. 10,000 sq. ft.	Min. 2.0 spaces 1.0 / add. 10,000 sq. ft.
Assembly	Min. 2.0 spaces 1.0 / add. 15,000 sq. ft.	Min. 2.0 spaces 1.0 / add. 10,000 sq. ft.
TRANSIT STATION	by Special Permit	by Special Permit

LONG TERM PARKING

	MX1	MX2
RESIDENTIAL		
Multi-Family	Min. 2.0 spaces .15 spaces / bedroom	Min. 2.0 spaces .20 spaces / bedroom
OFFICE	Min. 2.0 spaces 1.0 / add. 10,000 sq. ft.	Min. 2.0 spaces 1.5 / add. 10,000 sq. ft.
RETAIL	Min. 2.0 spaces 1.0 / add. 10,000 sq. ft.	Min. 2.0 spaces 1.0 / add. 10,000 sq. ft.
OTHER COMMERCIAL	by Special Permit	by Special Permit
CIVIC		
Non-Assembly	Min. 2.0 spaces 1.0 / add.15 employees	Min. 2.0 spaces 1.0 / add.10 employees
Assembly	Min. 2.0 spaces 1.0 / add. 20 employees	Min. 2.0 spaces 1.5 / add.10 employees
TRANSIT STATION	by Special Permit	by Special Permit

APPENDIX B4. BICYCLE PARKING TYPES

Appendix B Table 1B: Bicycle Parking Types. This table shows five common types of Bicycle Parking facilities.

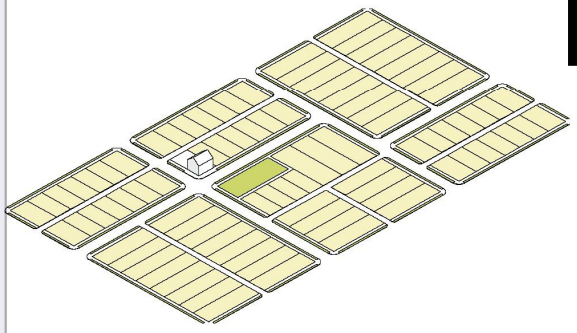
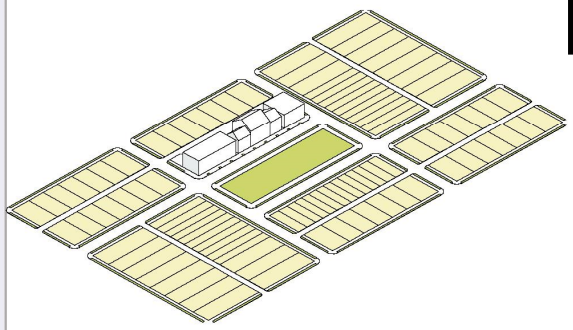
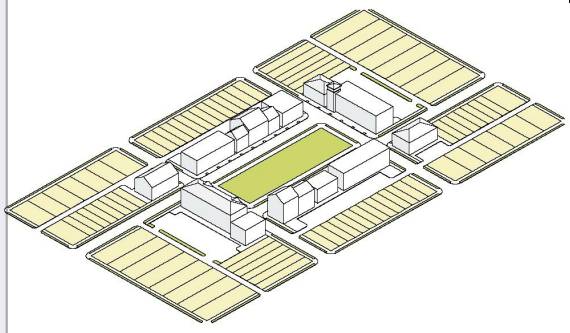
	MX1	MX2	
Bicycle Rack (Inverted "U," post and ring, etc.) 	▪	▪	Racks shall be capable of securing bicycles with at least two points of contact. Simple, easily identifiable forms should be used. Racks may be placed in the Private Frontage, Public Frontage, or within buildings.
Bicycle Rack (decorative, public art) 	▫	▪	Decorative racks shall be recognizable as bicycle parking facilities and shall be held to the same performance standards as other bicycle racks. Such racks may be provided for Civic Buildings, Civic Spaces, and other locations of historic, social, or cultural importance.
Bicycle Shelter 	▫	▪	Shelters shall be highly recognizable and integrated with transit and/or related land uses requiring medium or long term bicycle parking needs. Each shelter shall include bicycle parking racks capable of securing bicycles with at least two points of contact.
Bicycle Locker 	▫	▪	Bicycle Lockers shall be placed in a highly visible and well-lit location, but shall not disrupt the function and order of the public realm. They should be monitored and maintained to discourage vandalism.
Bicycle Station 		▫	Bicycle Stations should be located in highly visble locations, ideally near transit. They should offer a variety of services that may include repair, rental, cafe, lockers, showers, and storage facilities.

▪ By Right

▫ By Special Permit

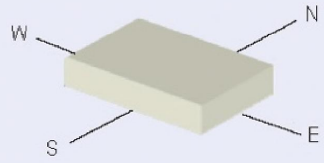
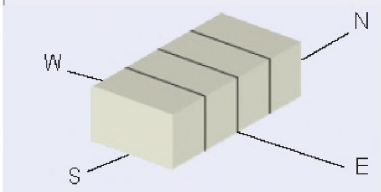
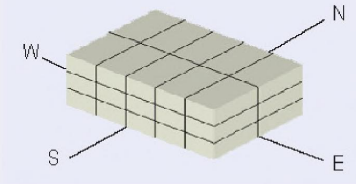
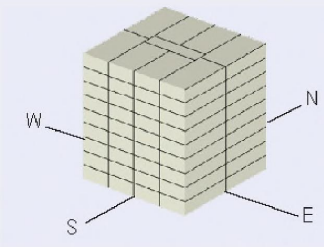
APPENDIX C1. RETAIL TYPOLOGY FORM-BASED GRAPHICS

APPENDIX C: Retail Typology Form-based Graphics. This table describes and illustrates the types of Retail in a neighborhood context and the MX Zones in which they may be allocated.

Corner Store: A Retail business that provides a convenient location for quick purchases from a small inventory of diverse consumer products (predominantly food and incidental convenience items). It typically has a GLA of less than 5,000 square feet, with convenient parking and access to their immediate consumer market, consistent with their MX zone designation, and with extended hours of operation. Neighborhood Ideal: <5,000 square feet. ULI/ICSC equivalent: Convenience Store		**MX1** **MX2**
Neighborhood Shops: A collection of stores and Commercial establishments providing personal services and convenience goods in the immediate neighborhood. Usually anchored by a grocery store/supermarket and/or drug store, and often including one or more local restaurant or cafes, it has a GLA of 25,000-80,000 square feet. Neighborhood Ideal: 60,000 square feet. Trade Area Radius: 1/2 - 3 miles, depending upon MX zone ULI/ICSC equivalent: Neighborhood Center		**MX1** **MX2**
Main Street Shops: A supermarket and drug store-anchored center providing for a range of daily needs and personal services to the surrounding neighborhoods. Typically sized at 120,000-400,000 square feet of GLA, it may include a junior department store, an expanded range of shopping and specialty goods, and several food establishments at a variety of price points and service levels. Downtown Ideal: 280,000 square feet. Trade Area Radius: 2-5 miles, depending upon MX zone ULI/ICSC equivalent: Community Center		**MX2**

APPENDIX C2. SURFACE TO VOLUME RATIO & BUILDING ORIENTATION

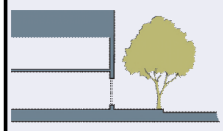
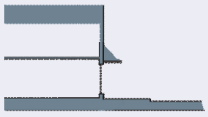
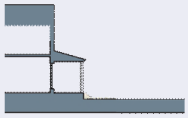
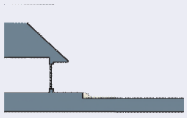
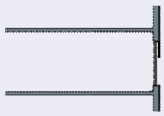
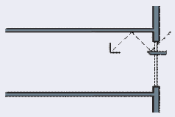
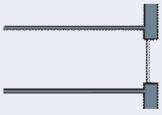
APPENDIX C: Surface to Volume Ratio and Building Orientation. This table shows the most basic building types and the level of their Surface to Volume Ratio and recommended orientation to achieve lowest energy use. The black lines on the building envelopes indicate shared walls. Each shared wall reduces a unit's surface-to-volume ratio.

	MX1	MX2	
Single-unit one story  S/V Ratio: High Orientation: E-W	▪		The high surface-to-volume ratio of a single family home means that building orientation is the most significant way to reduce energy use through massing.
Side-by-Side Units  S/V Ratio: Medium Orientation: N-S	▪	▪	Two shared party walls lowers the surface to volume ratio and reduces the energy use of each unit. Energy modeling has shown that orienting townhouse buildings with multiple units north-south significantly reduces energy usage.
Multi-unit  S/V Ratio: Low Orientation: E-W		▪	Multi-family units have several shared walls and a low surface-to-volume ratio per unit. Building orientation should maximize passive solar.
High-rise  S/V Ratio: Low Orientation: E-W			High rise buildings have a low surface-to-volume ratio per unit, however added systems such as elevators and water pumps may increase overall building energy use. Orientation should minimize energy use.

Module by Farr Associates. Chart information for the single unit and townhouse building adapted from energy modeling performed by Alan Chalifoux.

APPENDIX C3. SHADING OF GLAZING

APPENDIX C: Shading of Glazing This table illustrates methods to achieve high levels of shading glazing within each zone.

	MX1	MX2
Tree 	•	
Awning (see Section 3.X for Awning Requirements) 	•	•
Porch 	•	
Roof Overhang 	•	•
Exterior Shade 	•	•
Light Shelf 	•	•
Deep Windows 	•	•
Double Skin 		•

APPENDIX C4. LIGHT IMPRINT MATRIX

Transit Village Design District

a. PAVING	MX1 Mixed-1 Zone	MX2 Mixed-2 Zone		
Compacted Earth			L	$
Wood Planks			H	$$$
Plastic Mesh/Geomat	▪		L	$
Crushed Stone/Shell	▪		M	$
Cast/Pressed Concrete Paver Block	▪	▪	L	$$
Grassed Cellular Plastic	▪	▪	M	$$$
Grassed Cellular Concrete	▪	▪	M	$$$
Pervious Asphalt	▪	▪	L	$$
Asphalt	▪	▪	L	$
Concrete	▪	▪	L	$$
Pervious Concrete	▪	▪	L	$$
Stamped Asphalt	▪	▪	L	$$$
Stamped Concrete	▪	▪	L	$$$
Pea Gravel	▪	▪	M	$
Stone/Masonry Paving Blocks	▪	▪	L	$$$
Wood Paving Blocks on Concrete		▪	L	$$$
Asphalt Paving Blocks		▪	M	$$
b. CHANNELING				
Natural Creek			L	$
Terracing			M	$$
Vegetative Swale			L	$
Drainage Ditch			L	$
Stone/Rip Rap Channels	▪		L	$$
Vegetative/Stone Swale	▪	▪	L	$
Grassed Cellular Plastic	▪	▪	M	$$$
Grassed Cellular Concrete	▪	▪	M	$$$
Soakaway Trench	▪	▪	M	$$$
Slope Avenue	▪	▪	M	$$$
French Drain	▪	▪	M	$
Shallow Channel Footpath/Rainwater Conveyor	▪	▪	L	$
Concrete Pipe	▪	▪	L	$$
Gutter	▪	▪	L	$$
Planting Strip Trench	▪	▪	L	$
Masonry Trough	▪	▪	L	$$
Canal	▪	▪	H	$$$
Sculpted Watercourse, i.e. cascades		▪	M	$$$
Concrete Trough		▪	L	$$
Archimedean Screw		▪	L	$$$

APPENDIX C4. LIGHT IMPRINT MATRIX (cont)

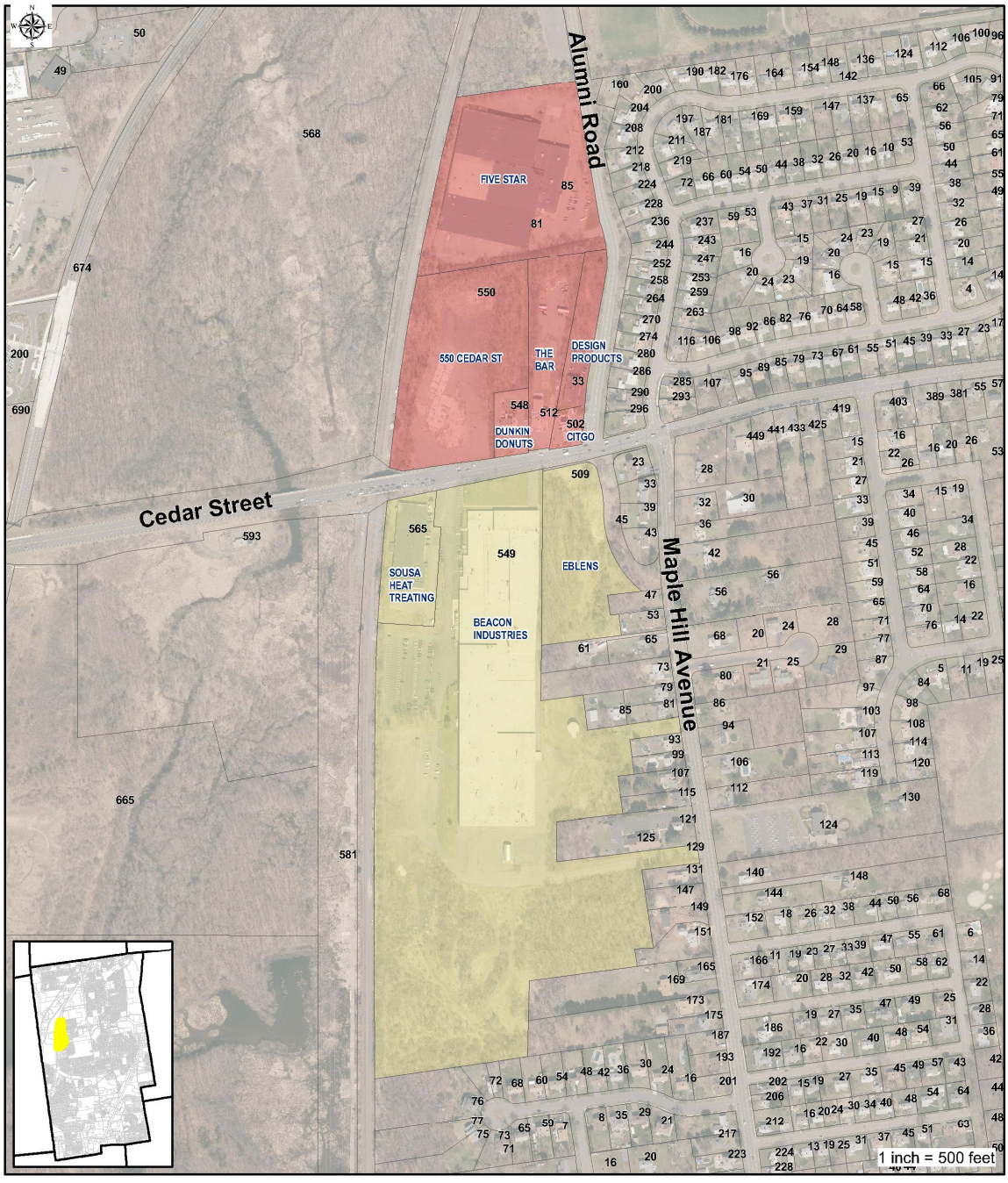
c. STORAGE	MX1 Mixed-1 Zone	MX2 Mixed-2 Zone		
Irrigation Pond			L	$
Retention Basin with Sloping Bank			L	$$
Retention Basin with Fence	-		L	$$
Retention Hollow	-		M	$
Detention Pond	-		L	$
Vegetative Purification Bed	-	-	M	$$
Flowing Park	-	-	M	$$
Retention Pond	-	-	M	$$
Landscaped Tree Well	-	-	L	$$
Pool/Fountain	-	-	H	$$$
Underground Vault/Pipe/Cistern-Corrugated Metal	-	-	L	$$
Underground Vault/Pipe/Cistern-Precast Concrete	-	-	L	$$
Underground Vault/Pipe/Cistern-Cast in place Concrete	-	-	L	$$
Grated Tree Well		-	L	$$
Underground Vault/Pipe/Cistern-Plastic		-	L	$$$
Paved Basin		-	M	$$$
d. FILTRATION				
Wetland/Swamp			L	$
Filtration Ponds			L	$$
Shallow Marsh			M	$
Surface Landscape	-	-	L	$
Natural Vegetation	-	-	L	$
Constructed Wetland			M	$
Bio-Retention Swale	-	-	M	$$
Purification Biotope	-		H	$$
Green Finger	-	-	L	$$$
Roof Garden	-	-	M	$$$
Rain Garden	-	-	M	$$
Detention Pond	-		L	$
Grassed Cellular Plastic	-		M	$$$
Grassed Cellular Concrete	-		M	$$$
Waterscapes	-	-	H	$$$

L = Low Maintenance, M = Medium, H = High

Matrix by Tom Low, DPZ & Company

APPENDIX D. MAP OF TVDD REGION

TOWN OF NEWINGTON
TRANSIT VILLAGE DESIGN DISTRICTS N & S



TRANSIT VILLAGE DESIGN DISTRICT N

TRANSIT VILLAGE DESIGN DISTRICT S

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Information Technology Department GIS Services
131 Cedar Street Newington, CT 06111

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