City of Bristol
Zoning Commission

SPECIAL MEETING - THURSDAY, APRIL 10, 2025
VIRTUAL - ONLINE VIA ZOOM
5:00 P.M.

INFORMATION FOR THE PUBLIC TO ACCESS THIS MEETING:
Zoom Meeting link:
https://bristolct-gov.zoom.us/j/86163903323?pwd=OK6hbkaxGjcAknFx1HyQYrXzvbgLRy.1

Meeting ID:
861 6390 3323
Meeting Passcode:
123456
Join by phone
1-929-205-6099

AGENDA
REVISION #1

1. Call to Order

2. New Business

   a. Review of zoning update schedule

   b. Review of an amendment to the Adaptive Reuse of Existing Non-Residential Principal Buildings Regulation to add: Personal Service Establishment to the list of allowed uses.

   c. Review of an amendment to allow Battery Energy Storage Systems (BESS) as an accessory use in various zones.

   d. Review recommended Parking amendments

   e. Review recommended Commercial, Industrial and Mixed-Use Districts amendments

   f. Review of recommended Environmental amendments

   g. Review of recommended Residential zone amendments

   h. Review of recommended Cannabis Cultivation regulations

i. Review of Current Zoning Map (digital conversion)

j. Review of Proposed Zoning Map (digital conversion)

k. Review and discussion of survey results

3. Public Participation

4. Adjournment

REMINDER: The next Regular Meeting of the Zoning Commission is Monday, April 14, 2025

Phase 3 Schedule

Bristol Phase 3 Schedule		December '24					January '25				February '25				March '25					April '25				May '25				June '25				
	Week of:	2	9	16	23	30	6	13	20	27	3	10	17	24	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30
Commercial, Industrial, and Mixed-Use Districts and Uses (Task 3.1, 3.2, 3.6)	Commission Meetings																															
	Discovery																															
	Drafting																															
	Public Virtual Presentation																															
Housing and Residential Districts and Uses (Task 3.3)	Commission Meetings																															
	Discovery (Begin in Nov.)																															
	Drafting																															
	Public Virtual Presentation																															
Site Design including Buffer Requirements, Lighting, and Sign Regulations (Task 3.5)	Commission Meetings																															
	Discovery																															
	Drafting																															
	Public Virtual Presentation																															
Permit and Plan Requirements, Proc, & Admin. Items (Task 3.1)	Commission Meetings																															
	Discovery																															
	Drafting																															
	Public Virtual Presentation																															
Final Public Hearing(s) For Adoption																																

We are here

Date: 4/8/25

Recommendation 35: Expand uses permitted in Adaptive Reuse projects

Purpose: This recommendation is intended to allow for a wider range of uses within adaptive reuse projects that are compatible with the uses currently allowed in such projects.

Description: The recommendation would allow personal services establishments as a permitted use within an adaptive reuse project (adaptive reuse of existing non-residential principal buildings). These projects currently allow for a mixture of uses including but not limited to dwelling units, offices, studios, retail, and food and beverage establishments.

Geographic Extents: All zones where adaptive reuse projects are permitted including the R-10, R-15, R-25, R-40, A, BG, BHC, and I zones.

Potential Impacts: No adverse impacts. The proposed use is consistent and compatible with uses already permitted in an adaptive reuse projects.

Context: Recommendation 19 recommends expanding the range of uses permitted across the City's zoning districts, this recommendation is consistent with that approach.

Recommended Zoning Amendments:

1. Amend Section 4.3.1 Adaptive Reuse of Existing Non-Residential Principal Buildings, Item B to add Personal Service Establishments as Item 11.

Principal Use	Commercial, Industrial, and Mixed-Use Districts								
	BN	BG	BD	BT	BHC	I	IP-1	IP-3	IP-25
Taxicab Service	—	—	ZP	—	—	—	—	—	—
Tennis or Racquet Clubs	—	—	SP	—	—	—	—	—	—
Trucking and Courier Service	—	—	—	—	—	ZP+S	ZP+S	ZP+S	ZP+S
Unified Downtown Development	—	—	SP	—	—	—	—	—	—
Unified Residential Development	—	—	—	SP	—	—	—	—	—
Wholesale Business	—	ZP+S	—	—	—	—	—	—	—
Wholesale or Distribution Facility	—	—	—	—	—	ZP+S	ZP+S	ZP+S	ZP+S
Wood Processing Facility	—	—	—	—	—	SP	—	—	—

1. See Section 4.3.10 for information on required permit.
2. See Section 4.3.13 for information on required permit.

4.3 Use Specific Regulations

The following regulations are applicable to the specified uses across all districts where such uses are permitted unless otherwise stated.

4.3.1 Adaptive Reuse of Existing Non-Residential Principal Buildings

The adaptive reuse of existing non-residential principal buildings may be allowed subject to Special Permit and Site Plan approvals in accordance with Sections 16.1 and 16.2 and the following provisions:

A. The existing building shall contain a minimum of 1,500 square feet gross floor area.

B. The building shall be re-used for one or more of the following purposes:
   1. Any use allowed by Special Permit in accordance with Section 4.1.
   2. Dwelling units, subject to the provision of subsection H below.
   3. Business or professional offices, including medical or dental offices.
   4. Arts and craft facilities.
   5. Studios of dance, photography, graphic design, painting or similar artistic endeavors.
   6. Auditoriums or stage theaters.
   7. High-technology businesses without a manufacturing component.
   8. Boutiques or similar specialty retail establishments.
   9. Specialty food or beverage establishments.
   10. Non-profit or for-profit educational institutions.

C. The building shall be served by public sewer and public water systems.

D. The Commission shall determine that the existing building and its environs will be suitable for adaptive reuse and that the proposed use(s) will be in harmony with the surrounding neighborhood and consistent with the goals and policies of the city's Plan of Conservation and Development.

E. Any alterations made to the exterior of the existing building shall not detract from its architectural style.

F. Where feasible, no fire escape or stairway shall be added to any street-facing exterior wall of the building. If such requirement is not feasible, such fire escapes or stairways shall be architecturally compatible with the building.

G. The Commission may permit an addition to the existing building, provided that:
   1. The addition shall not exceed 50% of the gross floor area of the existing building.
   2. The addition shall conform to all other zoning requirements of the zoning district in which it is located.

Date: 4/9/25

Recommendation 36: Battery Energy Storage Systems

Purpose: Allow battery energy storage systems as an accessory use and ensure that the regulations provide adequate controls on their size, location, and installation.

Description: This recommendation creates a new accessory use (battery energy storage systems). It allows small-scale systems (80 kWh or less) to be permitted as of right in all zones (no Zoning Permit required). It limits the installation of 80 kWh to 600 kWh systems to commercial and industrial zones through a zoning permit requirement. Systems exceeding 600 kWh are permitted in industrial zones and require a Special Permit. This recommendation includes regulations on the size, location, screening, and security requirements for such uses.

Geographic Extents: All zones.

Potential Impacts: May facilitate the installation of such systems.

Context: Battery storage energy systems are increasingly being used as a means of storing energy on-site, particularly in association with solar energy systems and electric vehicle charging. The maximum size of systems allowed for residential use for a single dwelling is 80 kWh. These are most commonly located within or mounted to the exterior wall of the principal structure. "Tier 1" systems with a capacity of up to 600 kWh are most common in commercial applications. "Tier 2" systems are above 600 kWh and are often associated with large-scale or utility-related projects. Per the National Fire Prevention Association (NFPA) standard 855, operators of facilities with total energy storage exceeding 600 kWh must complete a hazard mitigation analysis, utilize fire suppression designs and equipment, conduct fire and explosion testing in accordance with UL 9540A, develop emergency planning, and conduct annual training of maintenance staff.

Recommended Zoning Amendments:

1. Add "Battery Energy Storage Systems (80 kWh-600 kWh)" to Section 5.2 Accessory Use Summary Table. Allow in all commercial and industrial zones with a Zoning Permit requirement.
2. Add "Battery Energy Storage Systems (>600 kWh)" to Section 5.2 Accessory Use Summary Table. Allow in only the I, IP-1, IP-3, and IP-25 zones with a Special Permit requirement.
3. Add new Section 5.4.7 Battery Energy Storage Systems and renumber existing subsections in Section 5.4 to maintain alphabetical order: (see next page)

5.4.7 Battery Energy Storage Systems

A. Applicability:
   1. Battery energy storage systems with a total capacity of 80 kWh or less shall be allowed in all zones as of right and shall not require a zoning permit, but shall be subject to all applicable building, electrical, and fire safety codes. Only one system shall be permitted per principal structure.
   2. Battery energy storage systems with a total capacity of more than 80 kWh and up to 600 kWh per site shall be permitted in accordance with Section 5.2 subject to the requirements of Items B through E below in addition to all applicable building, electrical, and fire safety codes.
   3. Battery energy storage systems with a total capacity of more than 600 kWh per site shall be permitted in accordance with Section 5.2 subject to the requirements of Items B through E below in addition to all applicable building, electrical, and fire safety codes.

B. Location:
   1. Shall not be located within a required yard or within 50 feet of a side or rear property line.
   2. Shall not be located closer to the front property line than the principal building.
   3. Shall not be located within 100 feet from a property containing a single, two-family, or multi-family residential use.
   4. Auxiliary equipment, including required transformers, may be located closer than 50 feet to a property line but shall not be located in a required yard and shall be suitably screened from public view.

C. Height and Size:
   1. The maximum height, including any supporting structures, shall not exceed 15 feet.
   2. The maximum system footprint, excluding the enclosure area between the required fence and system, shall not exceed 300 square feet.

D. Security and Screening:
   1. The system shall be substantially screened from public view using landscaping or opaque fence or wall.
   2. The system shall be enclosed with a fence of not less than 7 feet in height. The enclosure shall be secured with a self-locking gate or other secure locking mechanism required by relevant building and fire codes.
   3. A suitable vehicle mitigation barrier shall be provided if located within 25 feet of a parking area or driveway.
   4. Security lighting shall be provided for emergency operations and shall be reasonably shielded so as not to result in light trespass on adjacent properties.

E. Plan Requirement
   1. Systems exceeding 80 kWh up to 600 kWh: A site plan based upon a Class A-2 survey and stamped by a professional engineer demonstrating compliance with this Section shall be provided prior to the issuance of a Zoning Permit for a battery energy storage system. A site plan shall not be required for a system located within the principal structure.
   2. Systems exceeding 600 kWh: A Site Plan is required in accordance with the Special Permit requirements of Sections 16.2.2.E and the Site Plan requirements of Section 16.3.

4. Add the following definition to Section 19 Use Definitions:

Battery Energy Storage System: A system consisting of batteries, electric components, and associated equipment designed to store electrical energy for use at a later time.

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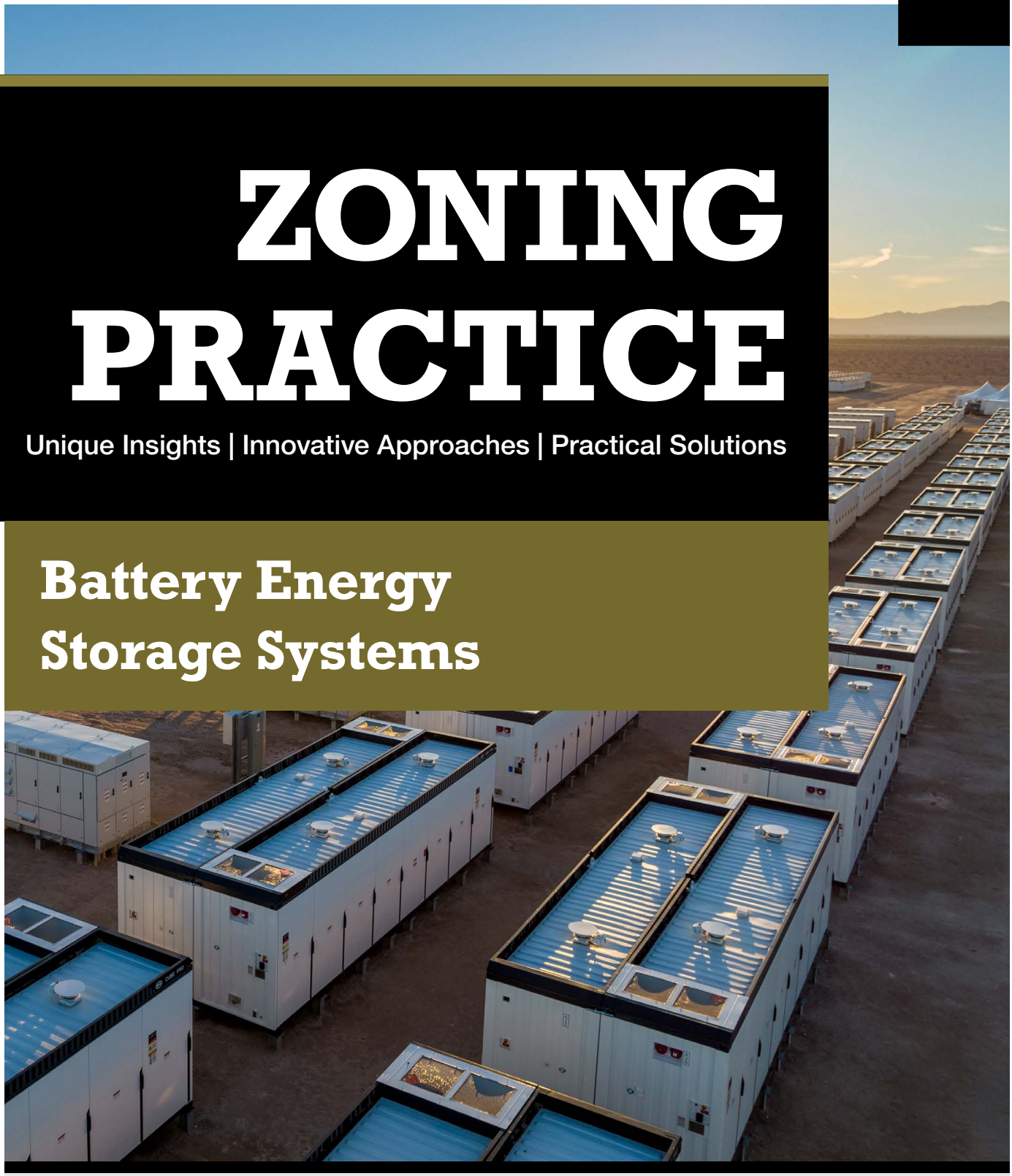
ZONING PRACTICE

Unique Insights | Innovative Approaches | Practical Solutions

Battery Energy Storage Systems



In this Issue: Battery Energy Storage Basics | BESS Market Forces | Energy Storage as a Land Use | Examples of Battery Storage Ordinances | Recommended Practices | Conclusions

Battery Energy Storage Systems

By Brian Ross, AICP, and Monika Vadali, PHD

The electric energy system in our country is undergoing dramatic changes, with new technologies and infrastructural investment occurring at a speed and scale unprecedented in our nation's history. One manifestation of those changes is the introduction of new land uses into our communities, land uses whose risks, conflicts, and synergies with existing land uses are uncertain or unknown by the host communities.

One such example is the rapid increase in use of battery energy storage systems (BESS) and related technologies. Grid-connected BESS regularly take the form of one or more shipping containers with ventilation equipment on the outside and row upon row of batteries and control systems secured inside. These systems are being deployed as part of utility substations and transmission systems and as part of solar and wind electric generation projects. Depending on state enabling legislation, some BESS will be exempt from local zoning, such as when BESS is part of renewable energy or transmission projects that are exempt. However, BESS have potential applications across the rural-to-urban transect, and most communities will need to address BESS in some form.

This issue of *Zoning Practice* explores how stationary battery storage fits into local land-use plans and zoning regulations. It briefly summarizes the market forces and land-use issues associated with BESS development, analyzes existing regulations for these systems, and offers guidance for new regulations rooted in sound planning principles.

A one megawatt hour lithium-ion BESS at the National Renewable Energy Laboratory's National Wind Technology Center (Photo by Dennis Schroeder, NREL 47215)

Battery Energy Storage Basics

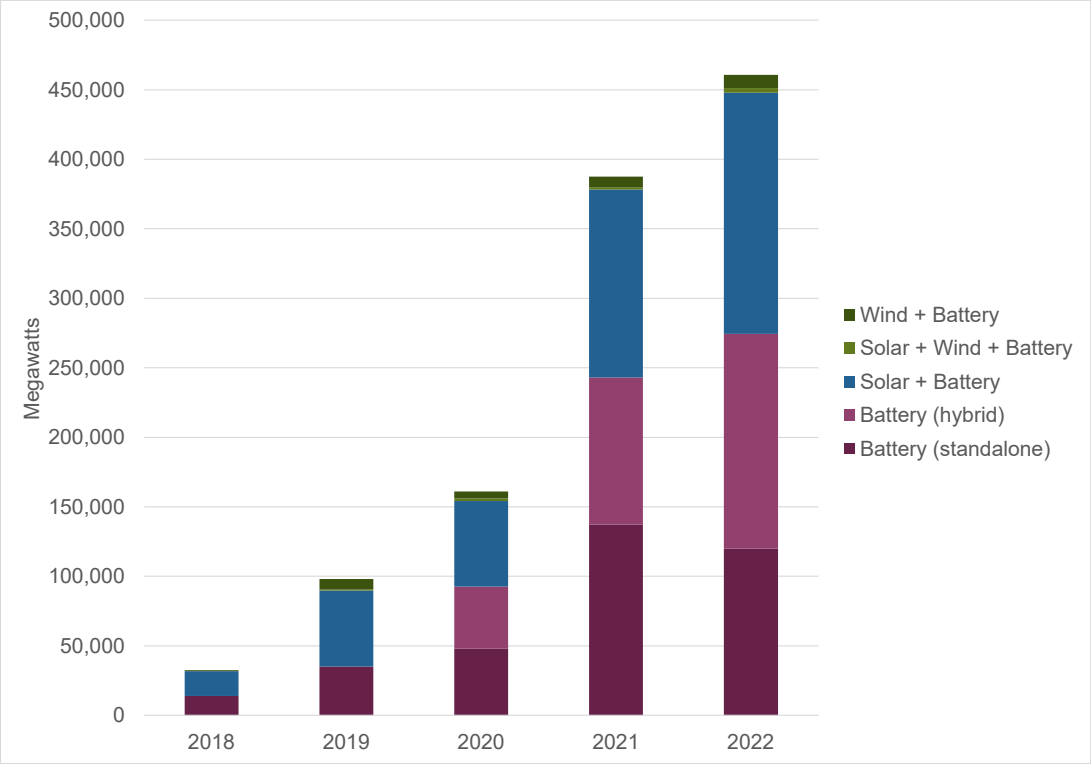
Energy can be stored using mechanical, chemical, and thermal technologies. Batteries are chemical storage of energy. Several types of batteries are currently used, and new battery chemistries are coming to market. The most used chemistry is the lithium-ion battery. These batteries are used in a variety of devices, from cell phones to electric vehicles to large-scale BESS.

To complicate matters, not all lithium batteries use the same chemistry and present different risks and benefits; there are actually six distinct chemistries with different benefits and use cases, and different risk profiles. The type of lithium battery used depends on the device or use case where energy storage is needed. Lithium iron phosphate (LFP) batteries are the preferred choice for grid-scale storage. LFP batteries are less energy dense than lithium nickel cobalt aluminum (NCA) and lithium nickel manganese cobalt (NMC) batteries—which are preferred in electric vehicles where weight matters— but more stable and have greater thermal stability (lower thermal runaway risk) than other lithium chemistries.

Emerging battery chemistries that are not lithium based also present different risk/benefit profiles, including promising characteristics for stationary uses. These include iron-air batteries, zinc-air batteries, flow batteries, and solid-state batteries. Several of these technologies promise to be a good choice for stationary storage and grid integration as they have a longer performance period, showing no degradation for up to 30 years (IEA 2023).

Solid-state batteries are typically used in medical devices like pacemakers and other wearable devices, but over the last decade there has been significant research in this field to expand applicability to automotive, transportation, and other industrial uses (Weppner 2003). These batteries use a solid electrolyte instead of a liquid/polymer gel and could potentially prove to be safer, less flammable, and provide better cycling performance and strength (Ping et al. 2019).

Zinc-air batteries are another emerging technology that could be useful for utility-scale energy storage. Although they have not yet been tested for grid energy storage, these batteries may be safer and more environmentally friendly than



Proposed generation capacity of projects that include battery storage in the interconnection queues between 2018 and 2022 (Berkeley Lab 2023)

lithium-ion batteries since they use water as a component and zinc is less destructive to mine (Proctor 2021).

BESS Market Forces

While non-battery energy storage technologies (e.g., pumped hydroelectric energy storage) are already in widespread use, and other technologies (e.g., gravity-based mechanical storage) are in development, batteries are and will likely continue to be the primary new electric energy storage technology for the next several decades. There are three reasons for the dramatic increase in deployment of grid-connected BESS:

1. The rapid increase in variable renewable energy development (especially solar and wind) creates a large market for energy storage technologies to control the flow of energy between power generators and end uses on the grid and mitigate energy spikes or power quality issues.
2. Dramatic drops in the cost of batteries combined with improved performance have made batteries a much more useful tool for electric grid resilience and reliability, potentially replacing fossil-fuel-based peaking power plants.
3. The **2022 Inflation Reduction Act** included significant new tax credits for energy storage, providing a substantial incentive that is rapidly pushing battery system investments across the nation.

BESS is a land use that can have value at any point on the electric grid. The grid runs across the rural-to-urban transect and is infrastructure that exists in almost every zoning district. The upshot is that communities will need to consider how stationary battery storage, particularly the larger BESS applications, fits into their land-use plans and should be addressed through zoning regulations.

Energy Storage as a Land Use

While stationary battery storage is a new land use for most communities, all communities already have and likely regulate other forms of energy storage. How communities treat existing energy storage land uses in ordinances can help inform the level of risk and degree of regulation needed to protect the community's health, safety, and general welfare.

A propane and oil distribution business in an incorporated city (Credit: Brian Ross)

Established Energy Storage Uses

While rarely categorized as "energy storage," many communities already host various energy storage land uses, and many of these uses carry safety risks. Long-established energy storage uses include gas stations (underground tanks store thousands of gallons of highly volatile fuel), propane storage and delivery businesses, ammonia storage and delivery businesses, and even grain elevators, which contain a vast and potentially volatile energy source (Donley 2023).

> "As is true with many technological advances or with new and potentially dangerous products, there is a tendency either to view the advance as a fearful monster, and outlaw it from the city, or to assume that the new project differs little from its predecessor… both of these are wrong" (ASPO 1951).

In addition, many industrial land uses include substantial energy storage facilities. Many of these land uses are storing more energy than typical BESS installations. Existing zoning standards addressing the risks associated with energy storage include isolation of the land use in particular districts, use of setbacks and buffers, requiring safety equipment and safety design standards consistent with established best practices for that energy risk, and training of first responders in how to manage the specifics of each type of energy storage. Some of these tools can also make sense for large-scale BESS, although adapted for safety best practices specific to batteries.

Unique Risks of Battery Storage

While examination of how non-electric energy storage facilities are regulated should inform regulation of battery energy storage, BESS do have some unique characteristics relative to other energy storage land uses and some unique considerations in addressing risks and emergency events. The primary safety risk associated with most battery chemistries, including

Perhaps the most common energy storage use in communities across the country (Credit: Brian Ross)

Residences near a grain elevator complex in Halifax, Nova Scotia (Credit: Alexei & Verne Stakhanov, Flickr)

the predominant lithium-based batteries, is thermal runaway or thermal stability. As indicated by this term, an incident (i.e., a hazardous electrical, thermal, or mechanical event) causes a cell or cells within the battery bank to overheat and can lead to an escalating thermal event that damages the BESS and can result in fire, or rarely, an explosion (Jeevarajan et al. 2022).

Some battery chemistries are more prone to thermal runaway than others, particularly chemistries with higher energy density (e.g., NMC and NCA). Planners should be aware that different types of lithium batteries carry different risks. In stationary applications, particularly BESS used in electric utility applications, LFP batteries are widely used and are less prone to thermal runaway.

According to the Electric Power Research Institute, there have been 22 BESS fires since 2012 in the U.S (but seven in 2023 alone) (2023). Some of the fires were minor, with the facilities being able to resume operation after the fire was suppressed (Twitchell, Powell, and Paiss 2023). But several higher profile fires or explosions that resulted in first responder injuries have raised awareness of risks and resulted in modified best practices in containing risks. Public perception was also shaped by high profile events, and lead to the perception that BESS presents risks (or risks greater than other energy storage land uses).

The National Fire Prevention Association (NFPA) standard **855** sets safety code thresholds for batteries. Under this standard, operators of facilities with total energy storage exceeding 600 kWh must complete a hazard mitigation analysis, utilize fire suppression designs and equipment, conduct fire and explosion testing in accordance with **UL 9540A**, develop emergency planning, and conduct annual training of maintenance staff. These requirements are not applicable to residential BESS; the International Fire Code limits residential battery banks to 20 kWh for residential applications (**§1207**). Multiple banks (up to 80 kWh total) can be installed if each bank is physically separated and protected from fire, but this is still well below the 600 kWh threshold.

Zoning standards can reference **NFPA 1: Fire Code**, **NFPA 70: National Electric Code**, **NFPA 855: Standard for the Installation of Stationary Energy Storage Systems**, and the International Fire Code in order to ensure that battery

A Tesla Powerwall residential battery system (Photo by Dennis Schroeder, NREL 48520)

installations are meeting safety best practices (rather than creating safety standards from whole cloth in an ordinance). States that set mandatory state-wide electric or fire codes will usually preclude a community from requiring additional safety standards or equipment.

American Clean Power (ACP) has developed the "**First Responders Guide to Lithium-Ion Battery Energy Storage System Incidents**" for first responders. Large-scale BESS site owners or managers (such as solar or wind farm operators or utilities installing at substations) should be required to train first responders in battery firefighting techniques and standards. Specific hazards noted by ACP include fire, explosion, arc flash, shock, and toxic chemicals.

Battery Energy Storage Use Cases

As the cost of batteries declines and the efficacy improves, batteries are being used in many new applications where costs were previously prohibitive. People are quite familiar with how this has changed consumer devices and function. Mobility devices using batteries, from electric bicycles and scooters to passenger vehicles and even buses, are also increasingly common in the market.

Stationary battery use cases are less well understood by the general public and are perceived as having land-use impacts that may require planning or zoning consideration. A review of the literature and existing standards applied by state and local jurisdictions shows that stationary battery applications fall into four general use cases, each of which has potential subcategories: residential, commercial, standalone utility asset, and integrated with wholesale energy generation.

Residential battery systems are generally coupled with rooftop or backyard solar arrays designed to supply household energy. These battery applications serve primarily a backup power or resilience function but are increasingly being deployed as an alternative to selling excess production to the utility as "net metering" buy back rates are reduced by state regulators or legislators. These systems all fall well below the 600 kWh NFPA 855 threshold for mandatory fire and thermal protections. Most residential backup systems would also fall below the 20 kWh International Fire Code (IFC) limitation for residential battery units.

Commercial battery systems are increasingly used in conjunction with on-site solar generation, particularly as

A commercial battery system outside of the Energy Systems Integration Facility at the National Renewable Energy Laboratory (Photo by Werner Slocum, NREL 74338)

a means to reduce the demand charge portion of commercial electric bills. Some applications are also designed to provide backup power or resilience benefits. Most systems will fall below the NPFA 855 threshold, but larger commercial or industrial applications will exceed the 600-kWh standard and need to meet structure containment, fire suppression, personnel training, and a variety of other standards.

Standalone utility asset battery systems are high-capacity systems deployed at substations or occasionally as a standalone land use, which serve to enhance performance and resilience of the local electric system. These systems will always be over the 600-kWh threshold and need to meet required safety and fire standards for large-scale energy storage.

Integrated with wholesale energy generation battery systems are high-capacity systems deployed within or as part of large-scale solar or wind facilities. These BESS serve the wholesale electric market at either the transmission or distribution system scale. These systems will always be over the 600-kWh threshold and need to meet required safety and fire standards for large-scale energy storage.

These use cases can be a distinguishing factor in how communities choose to regulate (or not) stationary batteries as a land use. Batteries incorporated into other land uses generally do not need separate consideration for setbacks or buffers. Smaller scale applications (residential and some commercial) similarly do not rise to the level of risk requiring special treatment through local zoning.

Examples of Battery Storage Ordinances

In October 2023, the Pacific Northwest National Lab (PNNL) published a **summary** of energy storage provisions in local ordinances (Twitchell, Powell, and Paiss). The study identified, through a search of the **Municode** database, 59 jurisdictions with ordinances (zoning but also building, fire, tax, and sustainability ordinances) addressing battery energy storage systems. The extensive search across thousands of jurisdictions shows that very few jurisdictions have clear standards for battery energy storage land uses. Similar experiences with solar and wind energy land uses demonstrated that the lack of definition and standards results in widely varying treatment across jurisdictions, slowing deployment and raising the likelihood of inappropriate standards.

The Great Plains Institute (GPI) also conducted a national scan of jurisdictions for locally developed (i.e., sub-state) battery energy storage zoning standards. GPI queried energy storage or renewable energy developers regarding jurisdictions

that have standards and identified others through news stories on energy storage installations or ordinance changes. Additional sources included the **Solar@Scale guidebook**, resources from the **SolSmart** national designation and technical assistance program, and unpublished work from the University of Michigan Graham Sustainability Institute's **Solar Zoning in the Great Lakes States** project (all funded by the U.S. Department of Energy). GPI's scan was to identify regional examples of local approaches to regulation of battery energy storage, not to complete an inventory of standards. GPI's scan looked at the details of 14 adopted or draft ordinances and two model ordinances across nine states.

While energy storage regulations are rare overall, some consistent patterns and practices can be identified across existing ordinances. BESS ordinances typically included the following components:

- *Definitions*: Provisions identifying the battery use cases that will be regulated and identifying the distinctions between use cases that fit with the jurisdiction's priorities.
- *Use permissions*: Provisions identifying the districts where BESS are permitted or conditional, and the circumstances where BESS is accessory and where BESS are a primary use.
- *Dimensional standards*: Provisions identifying setbacks, including different setbacks for different use cases; height standards; lot size standards; and density or intensity standards.
- *Performance and design standards*: Provisions addressing noise, visual impact, treatment of power lines, fencing, lighting, and signage.
- *Safety and first responder standards*: Provisions identifying the required emergency plans and hazard information to be submitted and maintained as part of the permit, identifying design requirements for fire or environmental considerations, information or training for local first responders, and codes or safety standards for equipment or management.
- *Decommissioning standards*: Provisions identifying required decommissioning thresholds, decommissioning standards and outcomes, and financial sureties that are recommended or required.

Definitions

BESS definitions show some consistency across jurisdictions, such as the many definitions that distinguish between types of batteries consistent with fire and safety standards. However, the definitions still varied considerably.

A standalone utility asset battery system at a substation in central Whatcom County, Washington (Credit: Robert Ashworth, Flickr)

Some definitions intend to capture all BESS use cases, while others focus on only one application. For instance, Johnson County, Iowa, defines all BESS in two categories that reflect NPFA standards for safety and reporting (a threshold definition used by many jurisdictions that have BESS ordinances) (**Ordinance No. 05-19-22-01**). This definition is used by a number of jurisdictions and likely originated from the New York State Energy Research & Development Agency (NYSERDA) **model ordinance** developed in 2020. Johnson County defines *Battery Energy Storage System, Tier 1* as "one or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time, not to include a stand-alone 12-volt car battery or an electric motor vehicle; and which have an aggregate energy capacity less than or equal to 600 kWh and, if in a room or enclosed area, consist of only a single energy storage system technology." *Tier 2* uses the same definition but has a capacity greater than 600 kWH or uses more than one battery technology or chemistry.

Some jurisdictions focus on a specific application or use case. The most frequent such application is BESS as a component of a solar or wind installation. Several jurisdictions addressed only this use case in their ordinance.

Another variation in definitions and uses is the treatment of BESS as a principal/primary use or as an accessory use. Some jurisdictions addressed only one or the other, and some both, but in different ways. For instance, Ellsworth, Maine, distinguishes between *accessory* and *stand alone* (i.e., principal use) *energy storage systems* based on how the energy from the battery is to be used (§56-14). To be considered accessory, the system "shall be designed with appropriate storage capacity to serve the principal use only and not the electric power grid." In contrast, other jurisdictions included BESS installed at substations to be an accessory use to the utility or essential service land use, while Pueblo County, Colorado, defines BESS on solar farms as accessory but as a principal use at a substation (**§17-168.050.C.3**).

Use Permissions

Jurisdictions varied in the breadth of districts where BESS is permitted. Yorktown, New York, permits utility-scale BESS (*Tier 2*) in all zoning districts under a special use permit (**§300-81.5.G**). Will County, Illinois, permits BESS in one agricultural district, a special-purpose open space district, and three industrial districts (**§155-7.30**). Systems occupying 10-acres or less only require a discretionary use permit in the agricultural district, while larger systems require a discretionary use permit in all but the special-purpose open space district. These limits could restrict BESS from being used more broadly on the distribution system at local substations.

Dimensional Standards

Most ordinances required BESS to meet general structure setback standards for the district in which the system was located. Those that set BESS-specific setbacks used distances of 50–150 feet from property lines. For example, Johnson County, Kansas, requires a 150-foot setback from property lines for BESS within large-scale solar facilities (**Resolution No. 038-22**). Amelia County, Virginia, was the most restrictive in GPI's review, requiring 5,000 feet between battery energy storage facilities and public roads and property lines (**§325-34.2.T(3)**).

Performance and Design Standards

Most BESS ordinances for large-scale installations included several elements of site design, including mitigating visual impacts through vegetation or other screening, fencing standards, lighting standards, and treatment of power lines. Screening standards varied from simple requirements to screen from some adjacent land uses to requiring vegetation management plans that screened the entire facility or used solid fencing.

Safety and First Responder Standards

Nearly all jurisdictions included submittal requirements (with the permit application or site plan) for an emergency plan, operations plan, or fire safety plan. Some jurisdictions required separate approval

An integrated with wholesale energy battery system at the Beacon Solar Plant in eastern Kern County, California (Photo by Dennis Schroeder, NREL 50688)

of first responder officials for emergency plans. Utility-scale BESS are subject to many of these requirements through the National Electric Code or the National Fire Code, and to equipment testing and installation standards set in NFPA 885. Some ordinances listed all the requirements, others simply incorporated safety and first responder requirements by reference.

Decommissioning Standards

Most BESS ordinances include decommissioning standards and require financial sureties for the decommissioning process. Ordinances varied significantly in detail about decommissioning standards. Jurisdictions that addressed BESS as a component of solar or wind facilities included BESS decommissioning as a component of the larger project.

Recommended Practices

Several organizations have created guidance documents on how to treat battery energy storage systems within zoning (and sometimes other) ordinances with an eye toward enabling the local grid benefits of battery storage. The PNNL study (described earlier) identified considerations and best practices for several land-use issues. The New York State Energy Research & Development Agency (NYSERDA) created a **battery energy guide** for local governments that included both zoning and building/electric/fire code permitting recommendations, covering both residential and commercial use cases and BESS. Many ordinances catalogued for this issue used the NYSERDA standards. American Clean Power has developed **guidance for local and state governments** that permit BESS or evaluate site-specific conditions, which includes a set of recommendations to inform local zoning choices.

BESS land-use applications and potential local benefits are also addressed in the **Solar@Scale guidebook** and in guidance from **SolSmart**.

Based on the review of best practices and considering implications of existing practices in jurisdictions who have included BESS in ordinance, here are some basic recommended practices and considerations for planning and zoning.

Exempt Small BESS from Zoning Standards

Small BESS (residential and commercial battery systems) located within existing buildings do not present land use issues, nor health and safety issues that are materially different from other electric devices or appliances. Safety and fire issues for these systems are addressed under the NEC and NFC. Consequently, zoning standards are generally not necessary for these energy storage systems.

Define BESS as a Distinct Use

Define BESS as a land use, separate from electric generation or production but consistent with other energy infrastructure, such as substations. BESS have potential community benefits when sited with other electric grid infrastructure.

The Case for Consistent Standards

Connexus Energy is an independent electric cooperative serving the northern metro area of the Minneapolis/St. Paul metropolitan region and is the largest co-op by number of members served in the Midwest. Connexus Energy's mission is to power its members and communities toward a smarter energy future with a passionate focus on affordability, innovation, safety, and grid reliability. Connexus is a leader in integrating community-scale solar and battery storage into its generation portfolio and positioning the nonprofit utility and its member consumers to take advantage of new technological innovation and market transformations.

In coordination with the U.S. Department of Agriculture's announcement of the updated Empowering Rural America program, Connexus began considering stationary energy storage at strategic locations in its service territory to lower costs and improve reliability as load growth continued and climate-related weather vulnerabilities increased. Having already navigated multiple jurisdictions' (sometimes unpredictable) land-use permitting processes for building solar generating facilities, Connexus wanted to know how stationary battery storage facilities would be treated under the zoning code and permitting processes for each jurisdiction in the co-op's service territory.

Connexus worked with GPI, to assess how the landscape of jurisdictions would evaluate and permit standalone battery storage facilities (not part of a solar or wind energy project). Possible installations could be totally standalone or located at existing substations, so GPI and Connexus focused on the communities that hosted distribution substations, which included cities, counties, and townships with land-use ordinances.

GPI reviewed the published ordinances for these communities and then conducted a survey and a series of interviews with land-use planners and community development staff. The ordinance review revealed that only one jurisdiction referenced energy storage as a land use, and then only in the context of the solar ordinance (a solar + storage installation). In other jurisdictions, BESS would, therefore, either be treated as an accessory use, regulated under a general category such as "utility services," or not permitted. The survey and interview process focused on asking how the jurisdiction would likely treat BESS, should an application come forward.

The interviews documented that, while there were some consistencies across jurisdictions, the likely regulatory standards and permitting process varied from jurisdiction to jurisdiction. Most respondents were unfamiliar with the purpose of, need for, and land-use impacts and risks associated with battery storage.

Responses as to how battery storage would be treated ranged from "it would not be allowed" to "it's a permitted accessory use at substations." The most common response was that large-scale battery systems would require a conditional use permit (CUP), and if located at an existing substation, would instead require a modification to the substation's CUP.

Respondents acknowledged that staff and decision makers would need to interpret their land-use standards in order to permit stationary battery storage. Several jurisdictions had an "essential services" or "public utility services" land-use category that included other electric system infrastructure, such as distribution lines, transformers, and related equipment. Such categories may or may not be deemed to include battery storage, depending on whether battery storage was considered a subset of the listed components. Such interpretive regulation creates uncertainty and can significantly affect permitting times, construction schedules and costs, and ultimate deployment.

The work demonstrates that as standalone battery storage projects become more common, there will be a need for establishment of zoning best practices and inter-jurisdictional consistency. Part of establishing best practices is helping local planners and decision makers understand the local need for energy storage, the role of storage as part of renewable projects, and the basics of the technology and its risks relative to more familiar land uses that include energy storage.

Connexus proactively addresses planned BESS installations with local government officials. Steps they take include education on safety for the local fire marshal provided by a third-party expert, presentations on the need for the installation for local reliability and cost savings, providing a tour of another battery facility to diminish uncertainty, conducting training for first responders, providing results of NFPA required safety tests, and helping local staff and decision-makers understand different battery chemistries.

An integrated with wholesale energy battery system at the AES Lawai Solar Project in Kauai County, Hawaii (Photo by Dennis Schroeder, NREL 57997)

Permit BESS as Accessory Uses

Permit BESS as an accessory use for sites with energy generation, particularly community- or utility-scale solar and wind facilities, subject to national safety standards (NFPA 855). Clarify that BESS are a permissible accessory use to substations within the substation footprint. Require a modification to an existing discretionary use permit or a new discretionary use permit for installations that would expand the substation area.

Allow BESS Across the Transect

Allow BESS as a conditional use in districts across the rural-to-urban transect. BESS can provide resilience and electric power quality benefits everywhere that the grid serves. How or where the electricity or power from the battery is used does not affect the land-use implications of the system, and generally should not affect how the BESS is regulated.

Require Compliance with NFPA 855

Require BESS applications to meet NFPA 855 standards, rather than adding additional local standards. Also, consider who will be responsible for preparing and training local first responders in BESS risks.

Require a Decommissioning Plan

Require BESS applications to provide a decommissioning plan. If the community requires financial surety for other kinds of uses, BESS should be subject to equivalent requirements. When BESS are accessory to a new energy generation or substation facility, decommissioning and financial surety for the system should be incorporated into standards for the principal use.

Conclusions

Communities across the nation are seeing dramatic changes in our electric energy system, with new technologies and infrastructural investment occurring at an unprecedented speed and scale. One example is the rapid increase in use of battery energy storage systems (BESS), both in "behind-the-meter" installations in homes and businesses, and in utility-scale applications at substations on the grid and as part of new generations projects, primarily solar and wind energy deployments.

BESS are, however, new types of land uses not previously seen in most communities. While behind-the-meter installations do not have significant land-use implications, large-scale BESS is raising concerns due to the uncertainty associated with a new land use and because energy storage is necessarily associated with health and safety risks similar to those of other land uses with energy storage facilities such as gasoline stations, propane and ammonia businesses, and grain elevators.

BESS are a land use that can have value at any point on the electric grid. Communities need to assess how to host new technology including distributed generation, utility-scale generation, expanded

grid infrastructure, and energy storage facilities. Planners need to have a passing familiarity with energy storage basics and technologies, the risks and nuisances associated with batteries in different use cases, the benefits to the community of BESS deployment, and how batteries are similar to and different from existing forms of energy storage in the community.

Note: *This issue is available free to all from Solar@Scale, a partnership between the International City/County Management Association (ICMA) and the American Planning Association (APA) that aims to help cities, towns, counties, and special districts understand and realize the potential benefits of large-scale solar development. For additional information about Solar@Scale visit* ***icma.org/programs-and-projects/solarscale****.*

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Section 6.9 ~~Reserved~~ Alternative Energy Accessory Structures (AES)

6.9.1 Purpose:

The purpose of this regulation is to provide for the placement of alternative energy structures (AES) which are accessory to the primary use of a parcel. When located in a manner which is safe, efficient, and environmentally responsible, these installations can help to support local energy needs and increase grid reliability in a manner which does not disrupt adjacent properties.

6.9.2 Applicability:

In addition to any relevant provision of the CT General Statutes (as they may be amended) the provisions of this section shall apply to any alternative energy source installed or modified within the Town with a total generation, or capacity of up to 1 megawatt (MW).

The relevant portions of Section 3 (Zone Use Regulation) should be consulted for any alternative energy structure which is proposed as a primary use.

6.9.3 Permit Required:

No AES shall be constructed, located or modified unless a Zoning Permit has been obtained in accordance with Section 7.2.

6.9.4: Definitions:

A. Battery Energy Storage System (BESS): A system consisting of batteries, electric components, and associated equipment designed to store electrical energy for use at a later time.

6.9.5: Battery Energy Storage System:

A. Location:
   1. Shall only be permitted on property located within the I (Industrial), B-BT (Business Berlin Turnpike), and PD (Planned Development) zones.
   2. Shall be located within a side or rear yard only.
   3. Shall not be located closer to the front property or street line than the principal building.
   4. Shall not be located within 50ft from side or rear property lines.
   5. Shall not be located within 100ft from a property containing a single, two-family, or multi-family residential use.
   6. Auxiliary equipment, including required transformers, may be located closer than 50ft to a property line but shall not be located in the required yards and shall be suitably screened from public view.

B. Height and Size:
   1. The maximum height of a BESS, including any supporting structures, shall not exceed 15ft.
   2. The maximum system footprint, excluding the enclosure area between the required fence and system, shall not exceed 300 square feet.

C. Security and Screening:
   1. Shall be substantially screened from public view using landscaping or opaque fence or wall.

EXAMPLE

2. Shall be enclosed with a fence of not less than 7ft in height. The enclosure shall be secured with a self-locking gate or other secure locking mechanism required by relevant Building and Fire Codes.
3. Shall provide a suitable vehicle mitigation barrier if located within 25ft of a parking area or driveway.
4. Security lighting shall be provided for emergency operations and shall be reasonably shielded so as not to encroach on adjacent properties.

D. Application Submission Requirements:

In addition to the permitting requirements of Section 7.2, applications shall include the following:

1. A statement prepared by a qualified licensed professional confirming that the application complies with all current and relevant Town Ordinances, Building and Electrical Codes, Connecticut State Fire Code, and other applicable fire codes and safety standards. This includes, but is not limited to, compliance with NFPA standards and relevant industry regulations.
2. A plot plan in compliance with the design standards requirements of Section 7.4.

EXAMPLE

Date: 3/25/25

Recommendation 1: Update and expand minimum parking requirements, providing minimum requirements for almost all uses.

Purpose: The current parking requirements lack parking standards for multiple uses and require that the Commission identify the appropriate number of parking spaces that should be required for those uses. This practice creates additional work for the Commission and results in uncertainties for the applicant. This practice may also result in inconsistent requirements across similar uses.

Description: The recommended amendments would provide a specified minimum parking requirement for nearly also principal uses and some accessory uses permitted by the zoning regulations. The parking requirement standardizes the required parking units of measure to the greatest extent possible and associates the minimum number of spaces required per gross square feet of floor area for most uses. Other standards of measure are also provided including number of dwelling units.

Geographic Extents: Applicable across all districts city-wide with unique standards for the BD District.

Potential Impacts: The adoption of this recommended amendment is expected to streamline the parking aspect of an application by making this aspect more predictable and reducing the burden on the Commission to establish requirements on a case-by-case basis. Because the recommended parking requirements are more precise than the existing standards, the recommended amendment may result in less off-street parking being constructed.

Context: Many cities (such as Hartford) have experimented with reducing parking requirements, particularly in their downtown areas to support redevelopment and infill development. The provision of off-street parking represents a significant share of the cost of most developments.

Recommended Zoning Amendments:

1. Replace the parking standards of Section 13.2.D with the following standards:

Conversion and Reuse	Existing	Recommended
Adaptive Reuse of Non-Residential Buildings	None	Parking requirement to be determined by Commission based upon proposed uses.
Conversion of Historic Dwellings	None	
Unified Downtown Development	None	
Sales Establishments		
Accessory Retail	4 per ksf	4.0 per ksf
Convenience Store	None	
Drugstore	None	
Grocery Store	None	
Pawn Shop	None	
Retail Store	4 per ksf (3 in BD), 4.5 per ksf shopping center	
Specialty Retail	None	
Building Supply	2.5 per ksf indoor + 1 per ksf outdoor storage area	2.5 per ksf indoor + 1.0 per ksf outdoor sales area
Garden Supply	None	
Retail Store-Large Goods	2.0 per ksf	
Farm Stand	1 per 5 linear foot sheltered display or sales frontage	1 per 5 linear foot sheltered display or sales frontage

Food & Beverage Service	Existing	Recommended
Bar or Club	None	12.0 per ksf
Brewpub	None	
Restaurant, Fast Food	5.0 per ksf	8.0 per ksf
Restaurant, Sit-Down	5.0 per ksf	
Microbrewery	None	8.0 per ksf indoor visitor space+ 3.0 per ksf office space+ 1.0 per ksf indoor production space
Restaurant, Take-Out	5.0 per ksf	4.0 per ksf
Specialty Food or Beverage Establishment	None	
Catering Service	None	3.0 per ksf
Kitchen Incubator	None	
Specialty Food or Beverage Manufacturer	None	
Office and Technology Uses		
Business or Professional Office	3 (2 in BD) per ksf	4.0 per ksf
Government Office or Building	None	
Medical Office	4.5 per ksf (3.5 in BD)	
Social Services Agency or Charitable Institution	None	
High Technology Business	None	3.0 per ksf
Radio or Television Broadcast Facility	None	
Medical Laboratory	None	
High Technology Business	None	

Residential Uses	Existing	Recommended
Assisted Living Facility	1.5 per ksf	1.5 per ksf
Nursing or Convalescent Home	1.5 per ksf	
Community Residence	3 per home	2.0 per residence
Conversion to Three-Family	2 per du	2.0 per dwelling unit
Conversion to Two-Family	2 per du	
Live-Work Units		
Manufactured Home Park		
Residential, Single-Family	2 per dwelling unit, plus 1 per 2 resident domestic employees, roomers or boarders	
Residential, Three-Family		
Residential, Two-Family		
Residential, Multi-Family	2.5 per du (1.5 in BD)	
Government or Non-Profit Housing	None	1.5 per dwelling unit
Seasonal Camps and Cottages	Commission Determination	
Senior Housing	1.5 per unit	
Mixed-Use Development	0.75 per dwelling unit + 0.5 per bedroom + 1.5 per ksf gross floor area of non-residential uses	1.0 per dwelling unit + 0.5 per bedroom + 2.0 per ksf gross floor area of non-residential uses
Unified Residential Development	0.75 per dwelling unit + 0.5 per bedroom + 1 for every 4 residential parking spaces (or fraction thereof)	1.0 per dwelling unit + 0.5 per bedroom

Continued on next page

Industrial & Fleet Uses	Existing	Recommended
Composting Facility	None	2.0 + 3.0 per ksf office space
Contractor Yard	2 + 4 per ksf office space	
Environmental Service Facility	None	
Fuel Oil and Heating Fuel Storage Facility	None	
Junkyard	None	
Motor Vehicle Junk Yard	None	
Recycling Facility	None	
Removal of Earth Materials	None	
Renewable Energy Generation Facility	None	
Wood Processing Facility	None	
Bus Yard	1 per bus parking space (indoor or outdoor) + 3 per ksf office space	1.0 space per fleet parking space (or equivalent capacity) + 3.0 spaces per ksf office space
Fuel Oil Dealer	None	
Sanitary Services Yard	None	
Trucking and Courier Service	1 per delivery vehicle space (indoor or outdoor, excluding loading berths) + 3 per ksf office space	
Manufacturing Facility	2 per ksf	1.0 per ksf production/storage space + 3.0 per ksf office space
Industrial Laundry or Dry Cleaning	None	
Specialty Trade Contractor	None	2.0 per ksf
Helicopter Landing Facility	None	2.0 spaces per landing pad

Storage, Warehousing, or Distribution	Existing	Recommended
Climate Controlled Self-Storage Facility	Commission Determination	0.1 per ksf storage space + 3.0 per ksf office space
Self-Storage Facility	0.1 per ksf storage space + 4.0 office	
Public Warehouse	None	1.0 per ksf indoor distribution/ storage space + 3.0 per ksf office space
Wholesale Business	2 per ksf	
Wholesale or Distribution Facility	2 per ksf	
Vehicle or Equipment Sales and Service		
Boat or Recreational Vehicle Sales and Service	None	3.0 per ksf indoor office and display+0.15 per ksf outdoor display
Motor Vehicle Sales	3 per ksf indoor office and display+ 0.15 per ksf outdoor display	
Motor Vehicle Rental or Leasing	3 per ksf office and sales space	
Equipment Rental or Leasing	None	
Motor Vehicle Filling Station	4 per establishment + 2 per service bay + 3.5 per ksf retail sales area	2.0 per establishment + 2.0 per service bay + 3.0 per ksf office and retail sales area
Motor Vehicle Detailing Facility	None	3.0 per establishment + queuing requirement
Car or Truck Wash	3 per facility, plus adequate stacking room to accommodate 5 cars per stall	
Motor Vehicle Repair or Service Facility	2 per bay +3.5 per ksf retail sales area	2.0 per service bay + 3.0 per ksf office and retail sales area

Continued on next page

Shopping Centers	Existing	Recommended
Shopping Centers	4.5 per ksf	4.0 per ksf
Recreation or Entertainment Facility		
Indoor Entertainment Facility	1 per 3 seats (1 per 5 seats in BD), additional spaces may be required by Commission	0.33 per seat
Indoor Recreation Facility	3 per bowling lane	3 per bowling lane, other facility types to be determined by Commission
Fitness Club	None	5.0 per ksf
Tennis or Racquet Clubs	None	5.0 per ksf + 2.0 per court
Golf Course	10 per hole	10 per hole
Park or Open Space	None	To be determined by Commission
Outdoor Entertainment Facility	None	
Agricultural Uses		
Commercial Greenhouse	1 per ksf gross sales floor area	0.5 per ksf gross indoor greenhouse area
Nursery	1 per ksf gross sales floor area	To be Determined by Commission
Farm	None	
Stable	None	0.25 per stall

Cultural or Institutional Uses	Existing	Recommended
Religious Organization or Institution	0.3 per seat	0.33 per seat for worship space + 2.0 ksf non-worship space
Cultural Institution	2 per ksf	2.0 per ksf
Civic Facility	1.5 per ksf (school) / Comm. all other	1.5 per ksf per school, 3.0 per ksf per library, Commission to determine requirement for other uses
Non-Profit Private School	1.5 per ksf	1.5 per ksf
Community Youth Organization	None	5.0 per ksf
Membership Organization	5 per ksf	
General Medical or Surgical Hospital	3 per ksf	3 per ksf
Cemetery	None	To be Determined by Commission

Continued on next page

Service Based Uses	Existing	Recommended
Hotel or Motel	1.5 per room+spaces determined by Comm.	1.0 per room + other uses (10 per ksf for restaurant, 7 per ksf for conference/ banquet)
Emergency Housing Shelter	None	4.0 per shelter
Funeral Home or Mortuary	0.3 per seat	10.0 per ksf
Animal Day Care Facility	None	3.0 per ksf
Animal Hospital	None	
Building Services	None	
Commercial Kennel	None	
Printing Shop	None	
Retail Dry Cleaner or Laundry	None	
Adult Day Care Center	None	4.0 per ksf
Child Care Center	4 per ksf	
Group Child Care Home (located outside of a residential home)	5 per ksf	
Laundromat	None	5.0 per ksf
Bank	5 (3.5 in BD) per ksf	
Personal Service Establishment	4 per ksf (3 in BD)	
Specialty Service Establishment	None	
For Profit School or Studio	5 per ksf	
Health Care Clinic	3.5 per ksf	
Drive-Up Facilities	**Existing**	**Recommended**
Car Wash	None	Queuing space for 5 vehicles
Other (Banks, Pharmacy, etc.)	None	
Restaurants, Take-Out, Specialty Food or Beverage Establishment	None	Queuing space for 10 vehicles

2. Add new Section 13.16 that requires a share of required parking spaces for any residential multifamily, mixed-use development, or unified residential development to be maintained as common use parking areas that may be available to visitors and residents as follows:

13.16 Common Parking for Multi-Family, Mixed-Use, and Unified Residential Development

The equivalent of at least 20% of the required parking for any multi-family residential, mixed-use residential, or unified residential development shall be common parking so as to be available to visitors or residents of any unit and shall not be assigned to individual units.

Date: 6/7/2024

Recommendation 2: Specify process for the Commission's determination of required parking.

Purpose: The current regulations require the Commission to determine the amount of off-street parking for multiple uses. While Recommendation 1 would reduce the number of properties that would be subject to their discretion, this authority will remain for some uses. The current regulations do not stipulate whether the applicant or the Commission is responsible for collection information necessary in making its determination.

Description: The recommended amendment specifies that the applicant is responsible for providing a recommendation regarding the number of spaces required and that such recommendation shall be provided by a traffic engineer or parking expert.

Geographic Extents: In all districts citywide.

Potential Impacts: No adverse impacts are anticipated.

Context: It is a standard practice in zoning, including within Bristol's zoning regulations, to require the information necessary to render a decision on an application.

Recommended Zoning Amendments:

Amend Section 13.2.C as follows (new text is shown in red):

Section 13.2 Amount of Off-Street Parking Required

Where the minimum number of parking spaces required for a particular use is to be determined by the Commission, the applicant shall provide a recommendation for the number of parking spaces required for the use in question. Such recommendation shall be provided by a traffic engineer or parking expert. In making its determination, the Commission shall be guided by the recommendations of the applicant and by the nature, intensity and/or mix of the proposed use, including projected attendance, the number of employees, visitors and/or customers, and the experience of similar facilities elsewhere.

Date: 6/7/2024

Recommendation 3: Provide more flexibility in the use of shared parking in the BD.

Purpose: Incentivize development in the Downtown by providing more flexibility in satisfying the parking requirements through the use of shared parking and off-site parking.

Description: The existing regulations allow for the use of parking that is shared between uses or is located off-site to meet parking requirements but the use in question must be located within 500 feet of the parking facility. The recommended amendment increases that distance to 1,000 feet in the BD district but maintains a 500-foot requirement in other districts.

Geographic Extents: Applicable to BD District.

Potential Impacts: May support redevelopment and infill development in the downtown.

Context: The use and allowance of shared parking and off-site parking is one of many tools used to support infill development and redevelopment in downtowns. It allows for more efficient and effective use of parking supply.

Recommended Zoning Amendments:

Amend Section 13.4.B Shared Parking and Section 13.6.B Location of Parking as follows (new text is shown in red):

Section 13.4.B Shared Parking

Upon provision of a parking study conducted by a traffic engineer or parking expert and the provision of a site plan, the Commission may allow up to 50% of the required parking spaces for a use which operates primarily during the evening or on weekends to be counted toward the parking requirements of a use which operates primarily during the daytime or on weekdays, and vice versa. All shared parking spaces shall be located within 500 feet of the main building entrance of the recipient use except that in the BD zone, such parking shall be located within 1,000 feet of the main building entrance of the recipient use. In approving such a reduction, the applicant shall demonstrate to the Commission that there shall not be a substantial overlap of peak parking periods for the uses and that arrangements satisfactory to the Commission have been made to guarantee long-term access to and use of the shared parking spaces by the recipient use.

Section 13.6.B Location of Parking

By Special Permit, the Commission may allow all or a portion of the required parking spaces to be located either on a separate lot under the same ownership as the use being served or on a separate lot under a different ownership than the use being served, provided that arrangements satisfactory to the Commission have been made to guarantee long-term access to and use of such spaces. All spaces approved under this provision shall be located within 500 feet of the main building entrance of the use being served except that in the BD zone, such parking shall be located within 1,000 feet of the main building entrance of the use being served.

Date: 6/7/2024

Recommendation 4: Reference Connecticut State Building Code for handicapped parking requirements.

Purpose: The recommended amendment references the requirements of Connecticut State Building Code to ensure that handicapped spaces are provided as required by the code.

Description: The current regulations refer to Connecticut General Statutes requirements for handicapped parking but does not refer to the building code requirements.

Geographic Extents: Applies to all districts citywide.

Potential Impacts: No adverse impacts.

Context: Specific handicapped parking requirements and provided in detail in the State building code.

Recommended Zoning Amendments:

Amend Section 13.7.3 as follows (new text is shown in red):

Section 13.7.3. Accessibility Requirements

C. The number, size, designation, location, and markings of parking spaces for the handicapped shall be as per the Connecticut General Statutes, Sec. 14-253a(h) and Section 1106 of the Connecticut State Building Code – 2021 IBC Portion, as amended.

Date: 6/7/2024

Recommendation 5: Relocate parking lot landscaping standards of Section 11 to Section 13 Off-Street Parking Requirements

Purpose: Place regulations applicable to parking within the same section by moving parking lot landscaping standards from Section 11 Landscaping and Site Features to Section 13 Off-Street Parking Requirements.

Description: Relocate Sections 11.1.3 Parking Lot Landscaping and 11.1.4.A Screening to Section 13. Maintain the standards as written.

Geographic Extents: Not applicable.

Potential Impacts: No impacts.

Context: Not applicable.

Recommended Zoning Amendments:

- Remove Section 11.1.3 and renumber subsequent sections.
- Remove Section 11.1.4.A and renumber subsequent sections.
- Amend Section 13.7.5 Landscaping, Curbs, and Islands as follows (see next page, relocated text is shown in red):

Continued on next page

Section 13.7.5 Landscaping, Curbs, and Islands

A. Screening shall be provided for parking areas which are adjacent to residential properties or visible from the street. Acceptable screening materials shall include:
   1. Evergreen hedges having a minimum height of four feet at the time of planting;
   2. Solid fences or walls, if approved by the Commission;
   3. Earthen berms; or,
   4. Any combination of the above materials.

B. Parking areas containing 10 or more parking spaces shall be suitably landscaped with appropriate trees, shrubs and ground cover, in accordance with the following:
   1. Parking areas containing 10 or more parking spaces shall contain at least one major tree and two shrubs per ten parking spaces or major fraction thereof, planted within and along the perimeter of the parking area.
   2. Parking areas containing between 20 and 99 parking spaces shall contain a minimum of 15 square feet of interior landscaping area per parking space, distributed among the end islands, interior islands and planting strips.
   3. Parking areas containing 100 or more parking spaces shall contain a minimum of 20 square feet of interior landscaping area per parking space, distributed among the end islands, interior islands and planting strips.
   4. Trees within and along the perimeter of parking areas shall be of such varieties which provide shade or are capable of providing shade at maturity.

C. In parking areas containing 10 or more parking spaces:
   1. Curbed islands shall be provided at each end of each row of parking spaces;
   2. Curbed islands shall be provided to interrupt long rows of interior and perimeter parking spaces in an arrangement acceptable to the Commission so as to allow for no more than 20 consecutive spaces in a single row;
   3. Such end and interior islands shall be a minimum of 9 feet wide by 17 feet long for a single row of spaces and 9 feet wide by 34 feet long for a double row of spaces;
   4. Such end and interior islands shall be landscaped in accordance with the requirements of Item B above.

D. In parking areas containing 100 or more parking spaces, planting strips shall be provided along every other set of interior parking spaces between abutting rows of spaces. Such strips shall be a minimum of 10 feet wide and landscaped in accordance with the requirements of Item B above. Planting strips should be protected from vehicles by a curb or wheel stop. Curbs may contain breaks to allow surface water flow into planting strips.

E. Except for parking spaces in driveways that serve single- or two-family dwellings, the perimeter of all parking areas, islands and driveways shall be curbed, to prevent damage to landscaping and lighting and to prevent interference with pedestrian use of walkways. Curbs may contain breaks to allow surface water flow into vegetated areas so as to reduce stormwater runoff.

F. Where provided, motor vehicle wheel stops shall be a maximum of six inches in height and shall be placed a maximum of 30 inches from the front of the parking spaces in which they are located.

Date: 6/7/2024

Recommendation 6: Establish porous, pervious, and permeable pavement incentive.

Purpose: Encourage the installation of porous, pervious, or permeable pavement surfaces to reduce stormwater runoff.

Description: This recommendation would allow the use of porous, pervious, and permeable pavement to reduce lot coverage across all zoning districts with an established lot coverage limit with the goal of reducing stormwater runoff and improving groundwater recharge.

Geographic Extents: Citywide, except within Aquifer Protection Areas.

Potential Impacts: Allows for a higher lot coverage than would otherwise be permitted.

Context: The existing regulations have no porous pavement requirement or incentive. Multiple cities across the US (Los Angeles, San Antonio, Minneapolis, and others) encourage or require uses of porous, pervious, and permeable pavements.

Recommended Zoning Amendments:

- Add Section 13.7.6 Porous, Pervious, and Permeable Pavement as follows:

13.7.6 Porous, Pervious, and Permeable Pavement

Porous asphalt, pervious concrete, or permeable pavers may be used to offset lot coverage of paved surfaces at a rate of 50% of the porous, pervious, or permeable pavement area. By example, a 1,000-sf porous asphalt parking area would only be counted as 500 sf of lot coverage. To qualify for such a reduction a pervious pavement area shall:

A. Be located outside of an Aquifer Protection Area.
B. Be designed and constructed in accordance with the Chapter 13 of the 2024 Connecticut Stormwater Quality Manual.
C. Cover a contiguous area of a minimum of 1,000 sf.
D. Be maintained for the life of the surface.
E. Be subject to periodic inspection by the Zoning Enforcement Officer to ensure adequate maintenance.

Date: 6/7/2024

Recommendation 7: Provide a Bicycle Parking Requirement

Purpose: Ensure that bicycles can be securely parked in a designated location.

Description: The current regulations do not require the provision of facilities for bicycle parking. The recommended amendment would require the provision of bicycle parking for multi-family, commercial, industrial, or institutional developments.

Geographic Extents: Citywide.

Potential Impacts: No adverse impacts expected.

Context: Cities and towns are increasingly providing and improving facilities to accommodate bicyclists in an attempt to support multimodal travel and embrace a Complete Streets approach to transportation.

Recommended Zoning Amendments: Add new Section 13.15 Bicycle Parking as follows:

13.15 Bicycle Parking

Bicycle parking facilities shall be provided as part of new multi-family developments of 4 units or more, and new commercial, industrial, or institutional developments.

A. Bicycle parking shall be provided at all new construction, changes of use, or substantial improvement and shall be provided at a rate of 1 bicycle parking space per 10 automobile spaces or at a rate of 1 space per 2,000 square feet of gross floor area, whichever is less. No more than 20 bicycle parking spaces shall be required.
B. Bicycle parking spaces shall:
    1. Provide a convenient place to lock a bicycle and shall be at least 6 feet long, 2 feet wide, and shall provide at least 7 feet of vertical clearance, unless a bicycle locker is provided.
    2. Be capable of locking the bicycle and supporting the bicycle in an upright position.
    3. Be securely anchored to a supporting surface.
C. Bicycle parking shall not interfere with pedestrian circulation and shall be separated from automobile parking.
D. For any use where bicycle parking is required, if the vehicular parking is covered or partly covered the bicycle parking will be covered at the same ratio.
E. Bicycle parking shall be located in proximity of a main building entrance and placed in an area that is highly visible.

Date: 6/7/2024

Recommendation 8: Reduce the parking requirement in the BD zone and simplify and provide more flexibility in the maximum amount of parking that is permitted.

Purpose: Universally reduce the parking requirement in the BD zone to incentivize infill development and redevelopment and ensure that parking is not overbuilt in the Downtown. Provide more flexibility in the maximum amount of parking that may be permitted to allow the development of more parking where required to support the land use.

Description: The existing regulations have lesser parking requirements for only specific uses in the Downtown. The parking reduction varies from use to use and many uses do not have a lesser parking requirement. The recommended amendment would provide a universal parking reduction of 25% for all uses across the Downtown. The amendment would also provide more flexibility in the maximum amount of parking that is required, which is currently limited to 5% above the required amount.

Geographic Extents: BD zone only.

Potential Impacts: May remove barriers to infill development or redevelopment in the BD.

Context: The Downtown is served by municipal parking facilities, on-street parking supply, private parking facilities, transit, and is home to a mixture of uses, which allows for walking between locations and a reduced dependency on automobile travel. Many cities have reduced or eliminated their downtown parking requirements.

Recommended Zoning Amendments:

- Eliminate Section 8.4.6 Parking Increase in favor of regulating the maximum amount of parking allowed in the BD through Section 8.4.4 in a more simplified form. Renumber subsequent sections.
- Amend Section 8.4.4 and reorder it as follows (amended text shown in red):

8.4.4 Baseline Off-Street Parking Requirement

A. The "baseline" number of off-street parking spaces shall be 75% of the sum of the required parking for each separate use in the proposed development, in accordance with Section 13.2. Except as approved by the Commission in accordance with the provisions of this section or Section 13.2, no fewer off-street parking spaces than this "baseline" number shall be provided for a proposed development.
B. The maximum number of off-street parking spaces shall be no more than 10% above the baseline requirement. This amount may be increased by Special Permit, which shall require that proof of parking demand exceeding the baseline requirement is provided by a traffic engineer or parking expert to the satisfaction of the Commission. In no case shall the off-street parking supply exceed the baseline parking requirement by more than 25%.
C. Additional off-street parking shall not be required for changes of use within an existing building or for building additions less than or equal to 500 square feet of gross floor area. This exemption from providing additional off-street parking spaces for additions shall only be granted once per property.

Date: 6/7/2024

Recommendation 9: Remove Section 8.4.5 Parking Reduction of BD zone regulations.

Purpose: Simplify the regulations and remove redundancies and conflicts between the BD zone regulations and the citywide parking regulations.

Description: Section 8.4.5 allows for shared use parking reduction of 35-45% in the BD. However, a shared parking reduction of up to 50% is authorized in Section 13.4, making Section 8.4.5 redundant and conflicting with Section 13.4. Removal of Section 13.4 would correct this.

Geographic Extents: BD zone.

Potential Impacts: No impacts.

Context: N/A

Recommended Zoning Amendments: Eliminate Section 8.4.5 and renumber subsequent sections.

Date: 6/7/2024

Recommendation 10: Provide visuals to support Section 8.4.7 and make minor adjustments.

Purpose: Provide more clarity to Section 8.4.7 Location of Parking Spaces and allow for the use of parallel parking in addition to diagonal parking.

Description: Section 8.4.7 is difficult to understand without the aid of visuals. It also permits only diagonal parking but does not enable parallel parking in front of buildings. The recommended amendment would allow for the use of parallel parking and provides visuals to demonstrate how parking areas should be situated. Minor adjustments have also been made to dimension requirements. The recommended amendment also requires a Special Permit for such parking and provides conditions by which the Commission may approve or deny such proposal.

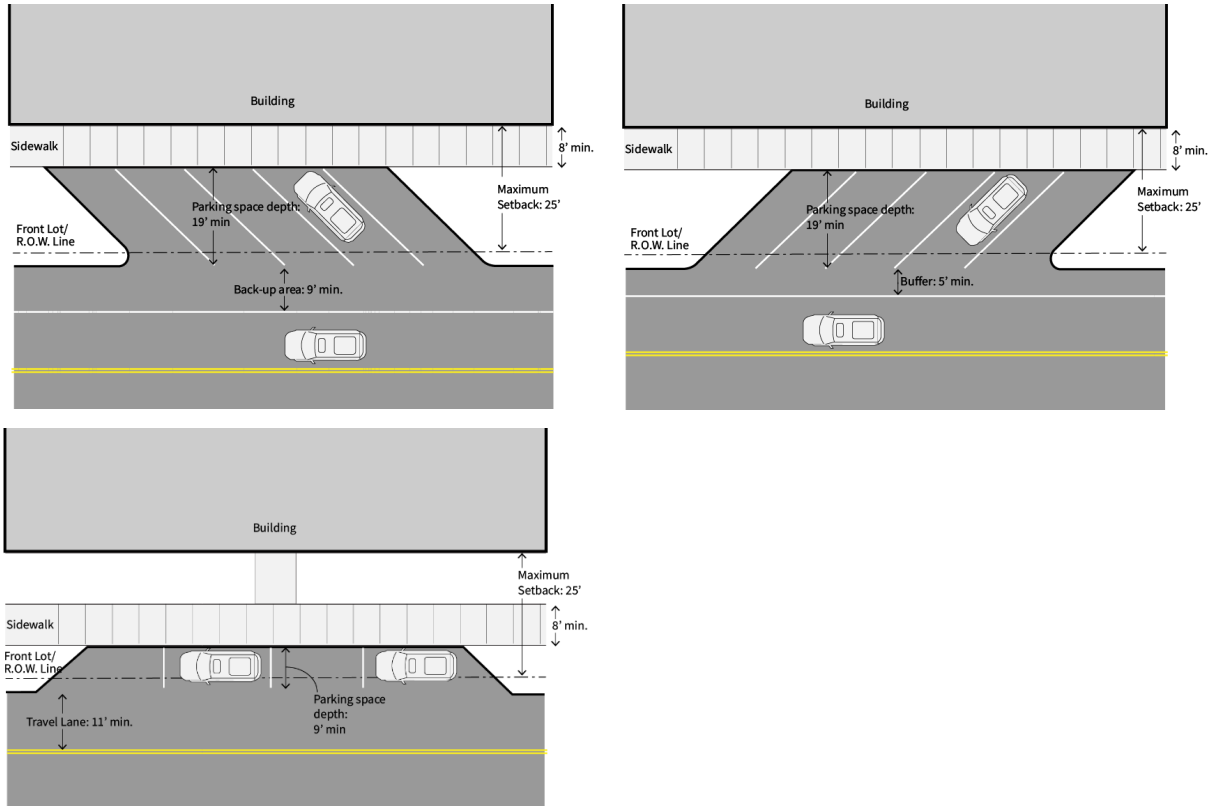
Geographic Extents: BD zone

Potential Impacts: No impacts.

Context: N/A

Recommended Zoning Amendments:

- Provide a visual aid to supplement Section 8.4.7 (see below).
- Amend Section 8.4.7 to allow for the use of parallel parking (see next page, added or revised text shown in red, text to be removed shown in ~~strikethrough~~).



8.4.7 Location of Parking Spaces

A. Where feasible, parking spaces shall be located to the rear of a building.
B. Parking spaces may be located along the side of a building, provided that such parking area does not occupy more than 45 feet or 35 percent of the frontage of the lot on which it is located, whichever is less.
C. Parking spaces may be located between the front of a building and the street, subject to the following provisions:
   1. A Special Permit shall be required. Review and potential approval of such parking arrangement shall be conducted in the course of the Special Permit review and approval process for the project. If the project is subject only to a Site Plan application, the location of parking spaces in front of the building shall require a Special Permit.
   2. Such parking spaces shall be located and oriented so as to reinforce a consistent street frontage and shall not be disruptive to pedestrian travel.
   3. Such parking spaces shall be directly accessible via the street right-of-way.
   4. Such parking spaces shall be separated from the building by a sidewalk having a minimum width of 8 feet, arranged in a single row located adjacent to the sidewalk, and arranged in one of the following configurations:
      a. Angled diagonally toward the general direction of the adjoining travel lane of the street. Such spaces shall have a minimum depth of 19 feet and a minimum back-up area of 9 feet~~, exclusive of the adjoining travel lane of the street~~ between such parking spaces and the adjoining travel lane.
      b. Angled diagonally away from the general direction of the adjoining travel lane of the street. Such spaces shall have a minimum depth of 19 feet and ~~the adjoining travel lane shall have a minimum width of 11 feet~~ a minimum buffer area of 5 feet between such parking spaces and the adjoining travel lane. Such arrangement shall require approval by the Bristol Police Commission and the Department of Public Works.
      c. Parallel to the adjoining travel lane of the street. Such spaces shall have a minimum depth of 9 feet and a minimum width of 23 feet. The adjoining travel lane shall be a minimum of 11 feet wide.
   5. Depending upon the width of the street right-of-way, such parking spaces may be located entirely within the right-of-way, partly within the right-of-way and partly on the lot, or entirely on the lot. Notwithstanding any other provisions of this section, the Commission may allow all or a portion of the building to have a build-to line as far back as 25 feet in order to accommodate such parking spaces.
   6. Such parking spaces shall be available for use by the public at all times.
   7. The property owner shall grant to the city such easements as are necessary to allow such parking

Date: 12/17/2024

Recommendation 19: Allow a Wider Range of Uses in Commercial and Industrial Zones

Purpose: Provide more flexibility in the uses permitted to better respond to changing market conditions and encourage the redevelopment of properties.

Description: This recommendation would allow a greater range of currently permitted uses in commercial and industrial zones.

Geographic Extents: Citywide, commercial, industrial, and mixed-use zoning districts

Potential Impacts: No adverse impacts.

Context: Changes in the retail market due to online commerce have resulted in a shrinking demand for retail space. More flexibility is needed in the zoning regulations to avoid vacant retail space and to allow for complementary uses that may not be currently permitted.

Recommended Zoning Amendments:

1. Amend the Section 4.2 Commercial, Industrial, and Mixed-Use Districts Principal Use Summary Table to allow for a wider range of uses in the zones (see next page).

Continued on next page

Principal Use (Only principal uses that are recommended for amendment are shown)	**Commercial, Industrial, and Mixed-Use Districts**								
	BN	**BG**	**BD**	**BT**	**BHC**	**I**	**IP-1**	**IP-3**	**IP-25**
Adaptive Reuse of Non-Residential Buildings	SP	SP	SP	—	SP	SP	—	—	—
Animal Day Care Facility	—	—	—	—	—	SP	SP	SP	SP
Brewpub	—	SP	ZP	SP	SP	SP	—	—	—
Climate Controlled Self-Storage Facility	—	—	SP	—	ZP+S	ZP+S	—	—	—
Contractor Yard	—	—	—	—	—	ZP+S	SP	SP	SP
Conversion to Three-Family	ZP+S	ZP+S	—	ZP+S	—	—	—	—	—
Conversion to Two-Family	ZP+S	ZP+S	—	ZP+S	—	—	—	—	—
Environmental Service Facility	—	—	—	—	—	SP	SP	SP	SP
Fitness Club	ZP+S	ZP+S	ZP/ SP[1]	—	ZP+S	SP	SP	SP	SP
For Profit School or Studio	ZP+S	ZP+S	ZP	—	ZP+S	ZP+S	SP	SP	SP
Fuel Oil and Heating Fuel Storage Facility	—	—	—	—	—	SP	SP	SP	SP
Indoor Entertainment Facility	—	SP	ZP	—	SP	SP	—	—	—
Medical Laboratory	—	ZP+S	—	—	ZP+S	SP	SP	SP	SP
Medical Office	ZP+S	ZP+S	ZP	SP	ZP+S	ZP+S	SP	SP	SP
Membership Organization	SP	ZP+S	ZP	—	ZP+S	—	—	—	—
Microbrewery	—	ZP+S	ZP	SP	ZP+S	ZP+S	ZP+S	ZP+S	ZP+S
Nursery	—	ZP+S	—	—	SP	SP	—	—	—
Restaurant, Take Out	SP	ZP+S	ZP	—	ZP+S	SP	SP	SP	SP
Social Services Agency or Charitable Institution	SP	ZP+S	ZP	—	SP	—	—	—	—
Specialty Food or Beverage Manufacturer	—	ZP+S	—	—	—	ZP+S	ZP+S	ZP+S	ZP+S
Specialty Retail	ZP+S	ZP+S	ZP	SP	ZP+S	—	—	—	—
Specialty Trade Contractor	—	—	—	—	SP	ZP+S	ZP+S	ZP+S	ZP+S
Taxicab Service	—	—	ZP	—	—	ZP+S	—	—	—
Tennis or Racquet Clubs	—	—	SP	—	—	SP	—	—	—
Wholesale Business	—	ZP+S	—	—	—	ZP+S	ZP+S	ZP+S	ZP+S

Key
Uses to be added as permitted uses shown in red.

Date: 3/24/2024

Recommendation 20: Amend Principal Use Permit Requirements

Purpose: Amend permit requirements for principal uses in commercial, industrial, and mixed-use zones to facilitate economic development, reduce administrative burden, and better distribute workload between the Planning and Zoning Commissions.

Description: This recommendation would reduce the Special Permit requirement for multiple principal uses across zoning districts to a Site Plan requirement. This recommendation seeks to make the permit requirement more consistent across uses and reserves the Special Permit requirement for high-intensity or highly impactful uses. It would also require a Site Plan Application for mixed-use development in the BD zone, which is currently permitted by Zoning Permit

Geographic Extents: All commercial, industrial, and mixed-use zoning districts.

Potential Impacts: This recommendation will shift workload from the Zoning Commission, which reviews Special Permits, to the Planning Commission, which reviews Site Plans.

Context: The Special Permit requirement is widely used across Connecticut for mixed-use, commercial, industrial and other high intensity uses but this permit requirement is often applied broadly without sensitivity to specific uses. This increases the workload for staff and commissions, lengthens the review and approval process, and adds cost to development.

Recommended Zoning Amendments:

1. Require a Site Plan Application for mixed-use development in the BD. This use is currently allowed by Zoning Permit by amending the Principal Use Summary Table of Section 4.2 (see next page).
2. Reduce the Special Permit requirement for select principal uses to a Site Plan requirement in commercial, industrial, and mixed-use zones by amending the Principal Use Summary Table of Section 4.2 (see next page).

Continued on next page

Principal Use (Only principal uses that are recommended for amendment are shown)	**Commercial, Industrial, and Mixed-Use Districts**								
	BN	**BG**	**BD**	**BT**	**BHC**	**I**	**IP-1**	**IP-3**	**IP-25**
Adult Day Care Center	~~SP~~ ZP+S	~~SP~~ ZP+S	ZP	—	~~SP~~ ZP+S	—	—	—	—
Business or Professional Office	~~SP~~ ZP+S	ZP+S	ZP	SP	ZP+S	~~SP~~ ZP+S	ZP+S	ZP+S	ZP+S
Child Care Center	~~SP~~ ZP+S	~~SP~~ ZP+S	ZP	—	~~SP~~ ZP+S	SP	SP	SP	SP
Fitness Club	—	ZP+S	ZP/	—	ZP+S	~~SP~~ ZP+S	~~SP~~ ZP+S	~~SP~~ ZP+S	—
Garden Supply	—	ZP+S	—	—	~~SP~~ ZP+S	—	—	—	—
Indoor Entertainment Facility	—	~~SP~~ ZP+S	ZP	—	~~SP~~ ZP+S	—	—	—	—
Medical Office	~~SP~~ ZP+S	ZP+S	ZP	SP	ZP+S	—	~~SP~~ ZP+S	~~SP~~ ZP+S	~~SP~~ ZP+S
Mixed-Use Development	SP	SP	ZP+S	SP	SP	—	—	—	—
Personal Service Establishment	ZP+S	ZP+S	ZP	~~SP~~ ZP+S	ZP+S	—	—	—	—
Restaurant, Sit-Down	~~SP~~ ZP+S	ZP+S	ZP	SP	ZP+S	SP	SP	SP	SP
Restaurant, Take Out	~~SP~~ ZP+S	ZP+S	ZP	—	ZP+S	—	—	—	—
Social Services Agency or Charitable	SP	ZP+S	ZP	—	~~SP~~ ZP+S	—	—	—	—
Specialty Food or Beverage Establishment	~~SP~~ ZP+S	ZP+S	ZP	SP	ZP+S	—	—	—	—

Key
Items in red are recommended for Site Plan approval.
The current permit requirement is shown in ~~strikethrough~~ text.

Date: 12/17/2024

Recommendation 21: Amend Accessory Use Permit Requirements

Purpose: More appropriately regulate accessory uses based upon potential impacts of the uses.

Description: This recommendation would modify the permit requirement for three accessory uses across most zoning districts. These uses include: ground-mounted solar panels, parking structures, and sports courts. This recommendation seeks to make the permit requirement more consistent for uses across districts and establish permit requirements that are aligned with the intensity of the use.

Geographic Extents: All commercial, industrial, and mixed-use zoning districts with exception of the BT zone.

Potential Impacts: This recommendation will shift workload from the Zoning Commission, which reviews Special Permits, to the Planning Commission, which reviews Site Plans and will require review of uses that are currently approved administratively by the Planning Commission.

Context: Sports courts are potentially impactful uses due to noise and must be sited and a buffered appropriately based upon adjacent land uses. Parking structures (this excludes residential garages) are large multi-level structures that have access requirements and should therefore be subject to a Site Plan review. Ground-mounted solar panels are benign uses that are environmentally beneficial and can appropriately be reviewed through a Site Plan requirement.

Recommended Zoning Amendments:

1. Increase the permit requirement for select accessory uses from a Zoning Permit to a Site Plan requirement in commercial, industrial, and mixed-use zones by amending the Accessory Use Summary Table of Section 5.2 (see excerpt of table below).
2. Reduce the permit requirement for select accessory uses from a Special Permit to a Site Plan requirement in commercial, industrial, and mixed-use zones by amending the Accessory Use Summary Table of Section 5.2 (see excerpt of table below).

Accessory Use	BN	BG	BD	BT	BHC	I	IP-1	IP-3	IP-25
Ground-Mounted Solar Panels	~~SP~~ ZP+S	~~SP~~ ZP+S	~~SP~~ ZP+S	—	~~SP~~ ZP+S	~~SP~~ ZP+S	~~SP~~ ZP+S	~~SP~~ ZP+S	~~SP~~ ZP+S
Parking Structures	—	~~ZP~~ ZP+S	~~ZP~~ ZP+S	—	~~ZP~~ ZP+S	~~ZP~~ ZP+S	~~ZP~~ ZP+S	~~ZP~~ ZP+S	~~ZP~~ ZP+S
Sports Courts	~~ZP~~ ZP+S	~~SP~~ ZP+S	~~ZP~~ ZP+S	SP	~~SP~~ ZP+S	~~ZP~~ ZP+S	~~ZP~~ ZP+S	~~ZP~~ ZP+S	~~ZP~~ ZP+S

Key
Recommended permit requirement shown in red text.
The current permit requirement is shown in ~~strikethrough~~ text.

Date: 12/17/2024

Recommendation 22: Amend BN Zone

Purpose: Provide more flexibility in the BN zone to allow for a greater scale of uses in response to changing retail market conditions.

Description: Increase the maximum permitted establishment size from 2,500 square feet to 5,000 square feet and remove the restriction on maximum building size.

Geographic Extents: BN zone

Potential Impacts: May incentivize redevelopment within BN zone.

Context: Retail market conditions are changing due to online commerce and demand for retail space has weakened.

Recommended Zoning Amendments:

1. Amend Section 8.2.1 as follows:

8.2.1 General Requirements

The following general requirements shall be applicable to all developments in the BN zone:

A. On any lot, the net floor area of each individual establishment shall not exceed ~~2,500~~ 5,000 square feet.

~~B. On any lot, the gross floor area of all buildings shall not exceed 12,000 square feet.~~

Date: 12/17/2024

Recommendation 23: Eliminate the Unified Downtown Development Regulations

Purpose: Eliminate an unproductive section of the zoning regulations to simplify the regulations and remove redundancy and potentially conflicting standards.

Description: Eliminate the Unified Downtown Development regulations, which are unique to the BD zone.

Geographic Extents: BD zone.

Potential Impacts: None

Context: The Unified Downtown Development Regulations have never been successfully used to facilitate development in the BD zone. Downtown development has successfully occurred without use of the Unified Downtown Development regulations. The regulations are complex and provide parallel and alternative standards to the BD zone. There is nothing in the regulations that prevent the unified development of parcels in the Downtown and the unified downtown development regulations are not required to facilitate such development.

Recommended Zoning Amendments:

1. Eliminate Section 8.4.8 Unified Downtown Development Projects regulations and remove references to the Unified Downtown Development in the Section 4.2 Principal Use Summary Table and from the Section 19 Use Definitions.

Date: 12/17/2024

Recommendation 24: Amend the IP-25 Zone Standards

Purpose: The IP-25 zone has a high minimum lot size requirement (25 acres) that presents a barrier to the use of land in the zone for developments on lots smaller than 25 acres unless subdivided. Amending the lot standards will enable smaller scale developments in this zone.

Description: The recommended amendment adopts the subdivision standards of the IP-25 zone as the standards for the zone thereby reducing the minimum lot size to 5 acres and reducing lot width, yard requirements, and building height while increase building and impervious coverage. A name change from IP-25 to IP-5 is recommended to align the district name with the new lot size minimum.

Geographic Extents: IP-25 zone

Potential Impacts: May incentivize new development in the IP-25 zone.

Context: There is only one IP-25 zone in Bristol, located in the northwest corner of the City, and bounded by the Plymouth town line, Minor Street, Hill Street, and Marsh Road. The zone is 234 acres in total and there are 8 parcels in the zone with three City-owned parcels comprising 28.7 acres. Seven of the eight properties in the zone are undeveloped. The developed property is the 139-acre industrial property occupied by ClarkDietrich/Holcim.

Recommended Zoning Amendments:

1. Rename the IP-25 to the IP-5. Update throughout the regulations and on Zoning Map as required.
2. Amend the standards in Section 8.1 as follows (new text shown in red, text to be removed shown in ~~strikethrough~~):

Standard	~~IP-25~~ IP-5
A) Minimum Lot Area (sf or acres if noted)	~~25 ac~~[1] 5 ac
B) Minimum Lot Frontage (ft)	N/A
C) Minimum Lot Width (ft)	~~500~~ 250
D) Minimum Front Yard on a State highway (ft)	~~125~~ 75
E) Minimum Front Yard on a City street (ft)	~~100~~ 60
F) Maximum Front Yard (ft)	N/A
G) Minimum Front Yard on a City street opposite a residential zone (ft)	~~150~~ 90
H) Minimum Side Yard (ft)	~~50~~ 25
I) Minimum Side Yard abutting a residential zone (ft)	~~150~~ 75
J) Minimum Rear Yard (ft)	~~50~~ 25
K) Minimum Rear Yard abutting a residential zone (ft)	~~150~~ 75
L) Maximum Building Height (ft)	~~60~~ 50
M) Maximum Building Coverage (%)	~~20~~ 30
N) Maximum Impervious Coverage (%)	~~60~~ 70

Date: 1/29/2025

Recommendation 25: Amend BD Zone Regulations

Purpose: Simplify the BD zone regulations to provide more consistent standards.

Description: This recommended amendment would simplify the BD zone regulations by eliminating the BD-1 and BD-2 subareas and treating the entire BD under a common set of standards. This would require an amendment to Sections 4.3.15, 8.4.2, and 8.4.8. This also requires amending the official zoning map to relabel existing BD-1 and BD-2 areas as BD.

Geographic Extents: BD zone

Potential Impacts: None

Context: The BD zone is divided into the BD-1 and BD-2. The standards vary minimally.

Recommended Zoning Amendments:

1. Eliminate Section 4.3.15 and provide those standards directly in an amended Section 8.4.2.
2. Amend Section 8.4.2.B as follows (new text in red, removed text in ~~strikethrough~~):

Building Element	Standard ~~BD-1~~ BD Zone ~~BD-2 Zone~~	Explanatory Notes
Floor-area ratio	Minimum of 0.6.	The gross floor area of all buildings on the lot and the lot area of all contiguous lots expressly devoted to the development (e.g., for off-street parking) shall be included in this calculation.
Build-to line	Maximum of 10 feet.	At least the first two building stories shall comply with this standard. In developments containing two or more principal buildings, each such building shall comply with this standard independently of any other building on the lot. The Commission may allow a build-to line as far back as 25 feet for up to 50% of the projected length of the building's street-facing walls if an outdoor dining area, an outdoor merchandise display area, or a public plaza or similar public space is created between the front lot line and the greater build-to line.
Building height	Minimum of 18 feet.	Building height shall be measured from the first-floor elevation of the building or the average elevation of the adjoining public sidewalk, whichever is greater. The building's basement or cellar (if any) shall not be included in this calculation. In developments containing two or more principal buildings, each such building shall comply with this standard independently of any other building on the lot.

Building Element	Standard ~~BD-1~~ BD Zone ~~BD-2 Zone~~	Explanatory Notes
Number of building stories	Minimum of 2 full stories. ~~Minimum of 2 full stories, for buildings designed to accommodate one occupant.~~ ~~Minimum of 1 story, for buildings designed to accommodate two or more occupants.~~	~~For buildings with two or more stories,~~ The gross floor area of the second story shall be equal to at least 75% of the gross floor area of the first story in order for it to be counted as a full story. The building's basement or cellar (if any) shall not be included in this calculation. In developments containing two or more principal buildings, each such building shall comply with this standard independently of any other building on the lot.
Area of street-level, street-facing walls consisting of windows and public entrance/ exit doors ("building fenestration")	Minimum of ~~65%~~ 60% of such wall area devoted to non-residential uses. ~~Minimum of 50% of such wall area devoted to non-residential uses.~~	The wall area shall be measured between 2 and 10 feet above the top of the building foundation. Windows and public entrance/exit doors shall contain clear or tinted glass capable of providing an unobstructed view from the outside into the building. In developments containing two or more buildings, each building shall comply with this standard independently of any other building on the lot.
Projected length of all street-level, street-facing building walls as a percentage of total lot frontage ("building frontage-lot frontage ratio")	Minimum of 65%.	The frontage of all contiguous lots expressly devoted to the development (e.g., for off-street parking) shall be included in this calculation.
Orientation of building entrances	Each street-level business shall have at least one entrance on a public street. No more than two businesses in the same building shall share the same building entrance unless the entrance also provides an entry to uses above or below the street level.	

Continued on next page

3. Amend Section 8.4.2.C as follows (new text in red, removed text in ~~strikethrough~~):

C. Corner Lot Standards

1. Buildings shall comply with the standards for building height, number of building stories, and build-to line on each street on which the lot has frontage.
2. Buildings shall comply with the standard for building fenestration on all street level, street-facing building walls.
3. ~~3.~~ Buildings/developments shall comply with the standard for building frontage-lot frontage ratio along the total of the frontage. ~~as follows:~~
   ~~a. If the lot has frontage on two streets in the BD-1 zone, the standard shall be met along each street.~~
   ~~b. If the lot has frontage on a street in the BD-1 zone and a street in the BD-2 zone, the standard shall be met along both the street in the BD-1 zone and along the total lot frontage.~~
   ~~c. If the lot has frontage on two streets in the BD-2 zone, the standard shall be met along the total lot frontage.~~
4. Building entrances shall be oriented to the street corner, or to the street having the higher functional classification (per CT DOT Functional Classification Map) along which the lot has frontage.

4. Amend Section 8.4.8 as follows:
   a. If Recommendation 23 to remove the Unified Downtown Development Projects from the regulations is adopted, then no action is necessary.
   b. If Recommendation 23 is not adopted, then all references to the "BD-1" in Section 8.4.8 should be replaced with "BD".
5. Amend the official zoning map to replace "BD-1" and "BD-2" labels and color scheme with a "BD" label and singular color.

Date: 1/29/2025

Recommendation 26: Amend BD Zone Boundary

Purpose: Include a commercial/industrial property adjacent to the BD zone that is currently zoned R15/BT to improve conformity of the property and expand potential for reuse/redevelopment of the site.

Description: This recommended amendment would modify the boundaries of the BD zone to include a commercial/industrial property located at 135-153 Center Street.

Geographic Extents: BD zone, R15/BT zone

Potential Impacts: May incentivize improvement of or reuse of site.

Context: There are few commercial sites in residential zones that directly abut the BD.

Recommended Zoning Amendments:

1. Amend the zoning map as shown below to include 135-153 Center Street (Map Block Lot 26-169) within the BD.

Date: 3/25/25

Recommendation 27: Cannabis Cultivation

Purpose: Regulate the cultivation of cannabis so as to permit only within indoor locations in the Industrial and Industrial Park zones and to provide adequate controls on their establishment to control potential nuisances associated with such use.

Description: Add cannabis cultivation and micro-cultivation as defined and authorized by Connecticut General Statutes Section 21a-420 as a Special Permit use in the Industrial zone, and Industrial Park Zones. Allow indoor cultivation only; prohibit outdoor cultivation.

Geographic Extents: Industrial zone, Industrial Park 1, 3, and 25 zones.

Potential Impacts: May result in establishment of a cannabis cultivation facility in the IP-1 or IP-25 zone. Location of such use in the I or IP-3 is unlikely given the residential zone distancing requirement and the size of those zones relative to their proximity to residential zones. May result in the establishment of a cannabis micro-cultivation facility in the I, IP-1, IP-3, or IP-25 zones.

Context: The zoning regulations currently lack regulations or restrictions on cannabis establishments permitted under Connecticut General Statutes Section 21a-420. Without regulations specific to cannabis establishments, establishments may locate in zones where similar non-cannabis establishments may be located. Multiple cities and towns in Connecticut permit Cannabis cultivators with varying restrictions on their location and operations. Below is a summary of regulations from five municipalities:

Town or City	Distancing Requirement from Residential Zone or Use	Distancing Requirement from Schools, Churches, Parks and other Sensitive Uses	Distancing Requirement from other Cannabis Cultivators	Other
East Hartford	none	none	none	Police and Fire Department approvals. Odor monitoring and mitigation
New Britain	100 feet	200 feet	1,000 feet	Security Plan Requirement
Rocky Hill	200 feet	200 feet	1,000 feet	
Southington	750 feet	750 feet	1,000 feet	
Waterbury	none	500 feet	2,000 feet	Security Plan, Odor Abatement Plan Requirement

Recommended Zoning Amendments:

1. Amend the Section 4.2 Principal Use Summary Table to including "Cannabis Cultivation" and "Cannabis MicroCultivation" as Special Permit uses in the I, IP-1, IP-3, and IP-25 zones.
2. Add new section 4.3.24 Cannabis Cultivation and Micro-Cultivation as follows:

4.3.24 Cannabis Cultivation and Micro-Cultivation

A. All Cannabis cultivators and micro-cultivators are subject to Article VIII of the City of Bristol Code of Ordinances.
B. Cannabis cultivation and cannabis micro-cultivation shall only be permitted as indoor uses. The outdoor cultivation of cannabis is prohibited within the City of Bristol.
C. Cannabis cultivation facilities shall be located at least 500 feet from a residential zone. Micro-cultivation facilities shall be located at least 250 feet from a residential zone. The distance requirement shall be measured by taking the nearest straight line between the facility building and the zoning boundary.
D. Consistent with Section 13-125 of the City of Bristol Code of Ordinances, no cannabis cultivator or micro-cultivator shall be permitted to operate on a site that is within 250 feet of any school, church, hospital, municipal park or municipal recreational facility as measured by taking the nearest straight line between the respective lot boundaries of said sites. The establishment of one of these uses within 250 feet of an existing cannabis cultivator or micro-cultivator shall not cause the cultivator or micro-cultivator to be non-conforming.
E. No cannabis cultivator or micro-cultivator shall be located within 1,000 feet of another cannabis cultivator or micro-cultivator. The distance requirement shall be measured by taking the nearest straight line between the respective lot boundaries of the sites.
F. The facility shall not generate waste or emissions that result in adverse environmental impacts to surrounding properties and mitigation measures shall be taken to control the generation of odor.
G. The Police Department shall review and approve a proposed security plan for the facility prior to granting of a Special Permit.
H. The Fire Marshal Office/Fire Department shall review and approve the planned location(s) for the storage of fertilizers associated with cannabis production and proposed fire detection and suppression systems prior to granting of a Special Permit.
I. The applicant shall have received a provisional license (or equivalent) approval from the Connecticut Department of Consumer Protection prior to granting of a Special Permit.

3. Add new the following definitions of Cannabis Cultivator and Micro-Cultivators to the Section 19 Use Definitions:

Cannabis Cultivation: A facility run by a person that is licensed to engage in the cultivation, growing and propagation of the cannabis plant at an establishment with not less than fifteen thousand square feet of grow space per CGS Section 21a-420, as amended.

Cannabis Micro-Cultivation: A facility run by a person licensed to engage in the cultivation, growing and propagation of the cannabis plant at an establishment containing not less than two thousand square feet and not more than ten thousand square feet of grow space, prior to any expansion authorized by the Commissioner of Consumer Protection per CGS Section 21a-420, as amended.

Date: 8/12/2024

Recommendation 11: Provide reference to the Aquifer Protection Area Regulations

Purpose: Ensure that projects comply with the City's Aquifer Protection Regulations.

Description: Provide a reference to the Aquifer Protection Regulations within the Zoning Regulations and require that Site Plans indicate the status of a property located within an aquifer protection area.

Geographic Extents: Aquifer Protection Areas as indicated on the City's Zoning Map.

Potential Impacts: May increase compliance with the Aquifer Protection Regulations.

Context: Aquifer Protection Areas are delineated by the State and define the land area that contributes ground water to active public water supply wells (or well fields) that serve more than 1,000 people. Bristol's Aquifer Protection Area is shown on its zoning map, which comprises of a large area in the northeastern part of town. Mapping provided by the state also indicates that there is an Aquifer Protection Area on the west side of the City that is primarily located within Plymouth but extends into Bristol in proximity of Mathews Street.

Recommended Zoning Amendments:

1. Add a new section, Section 15.7 Aquifer Protection Areas as follows:

15.7 Aquifer Protection Areas

Properties located in the Aquifer Protection Area (the Final Adopted Level A Aquifer Protection Area (APA) mapped by CT DEEP and as amended) shall be subject to the Aquifer Protection Area Regulations of the City of Bristol.

2. Add a requirement to Section 16.3.5 Site Plan Requirements, Item A, that the Site Plan survey identify whether the site is located within an Aquifer Protection Area (APA) and if partially located within an APA, provide the boundaries of such on the Site Plan survey as follows (new text shown in red):

16.3.5 Site Plan Requirements

A. The Site Plan shall be based upon an accurate and up-to-date Class A-2 survey of the property prepared in accordance with the standards as defined in the Code of Recommended Practice for Standards of Accuracy of Surveys and Maps, as prepared and adopted by the Connecticut Association of Land Surveyors, Inc., on September 13, 1984, as may be amended. The survey map shall be certified, signed and sealed by a registered land surveyor licensed to conduct business in Connecticut. If a separate survey map is used, a copy shall be attached to the Site Plan. The survey shall identify if a property is located within an Aquifer Protection Area and shall delineate an Aquifer Protection Area boundary that traverses the property (if applicable).

Date: 8/12/2024

Recommendation 12: Increase the permitted height of Ground Mounted Solar Energy Systems.

Purpose: Increase the maximum height of ground mounted solar energy systems to allow for their use over parking areas.

Description: Ground mounted solar energy collection systems are a permitted accessory use, but ground mounted systems are limited in height to 14 feet, which restricts their use above parking areas. This recommendation would allow ground mounted systems to be up to 20 feet in height to allow for use over parking areas.

Geographic Extents: All zoning districts.

Potential Impacts: The deployment of ground mounted systems of large parking areas may have an adverse visual impact in some contexts.

Context: Ground mounted solar energy systems are increasingly being deployed over larger parking areas. According to a 2021 study published in the official journal of the International Solar Energy Society, Connecticut could generate more than one third of the state's annual electricity consumption with solar canopies built over large, existing parking lots. Examples in Connecticut include Westfarms Mall, which recently constructed a four-acre array over an existing parking lot.

Recommended Zoning Amendments:

Amend Section 5.4.9.C as follows:

> C. Shall not exceed **20 feet** in height including all supporting structures.

Date: 8/12/2024

Recommendation 13: Strengthen regulations for the protection and planting of trees.

Purpose: Protect Bristol's tree cover and native trees and provide tree cover over areas of impervious surface to reduce urban heat-island effects.

Description: This recommendation seeks to strengthen the requirements for the preservation of trees, replacement of trees, and planting of new trees.

Geographic Extents: All zoning districts

Potential Impacts: Planting of trees adds a marginal amount to development costs and increases maintenance costs (watering of trees, leaf removal, pruning, etc.).

Context: A mature tree canopy is characteristic of New England communities. Preserving that canopy and replacing trees lost to development important to preserving the identity of Bristol. Trees also play an important role in mitigating the causes and effects of climate change by absorbing carbon dioxide and replenishing oxygen and cooling the local environment. Tree replacement requirements are common to zoning regulations. Payment in-lieu-of programs and tree funds are more commonly used in large cities such as New York City, which has a Parks Tree Fund that receives payments from those required to plant new street trees by the City's zoning regulations but cannot plant on-site. The City of Hartford has a tree ordinance that requires the inch-per-inch replacement of trees 13 inches or more or payment into a tree account.

Recommended Zoning Amendments:

- By municipal ordinance, create a tree fund for receipt of payment in-lieu-of planting with funds used exclusively for the planting and maintenance of trees in rights-of-way and on City land.
- Revise Section 11.1 Landscaping Requirements as follows (see next page, text to be removed shown in ~~strikethrough~~, text to be added show in red):

11.1.2 General Requirements

~~K. Where feasible, existing trees shall be saved; if grading is required in their vicinity, trees shall be appropriately welled or mounded to protect them from damage.~~

~~L. No trees five inches or greater in caliper as measured three feet above ground level shall be removed unless so approved by the Commission.~~

K. The removal 10 or more trees over 12 inches in caliper or the clearcutting of 5,000 sf or more of land containing trees more than 12 inches in caliper shall require a report to be provided to the Land Use Department by an arborist licensed in the State of Connecticut prior to the removal of such trees. The report shall indicate the number of healthy, non-invasive trees over 12 inches in caliper proposed for removal.

L. Existing non-invasive trees in healthy condition over 12 inches in caliper shall be preserved unless approved for removal by the Land Use Department. If such tree or trees are removed, the tree(s) shall be replaced with native trees (per UCONN's Native Tree and Shrub Availability List) on one-for-one basis. Replacement trees shall be planted on-site. If on-site planting is demonstrated to be partially or wholly infeasible, required trees may be planted off-site. Newly planted trees shall be a minimum of 2 inches in caliper (if deciduous) or 6 feet tall (if evergreen) and shall be maintained until successfully established. Trees that are not successfully established within one year of planting shall be replaced with a tree of the same or greater caliper or height. Trees planted as required by other sections of these regulations may be counted towards this requirement.

M. Payment in-lieu-of planting may be provided if the required planting of replacement trees cannot fully or partially be conducted on-site, or if planting cannot be conducted at an off-site location. A payment of $500 per required tree not planted shall be provided to the City of Bristol.

Date: 8/12/2024

Recommendation 14: Provide a Sustainability Incentive

Purpose: Provide an incentive for sustainable development to conserve resources, reduce stormwater runoff, reduce light pollution, reduce urban heat island effect, and encourage low-carbon forms of transportation.

Description: This recommended amendment would provide a coverage incentive for a non-single-family or duplex development that scores above a specified level by providing sustainable features.

Geographic Extents: All zoning districts

Potential Impacts: No adverse impacts

Context: Connecticut General Statutes Section 8-2(c)(4) enables municipalities to provide incentives in their zoning regulations for: solar and other renewable forms of energy; combined heat and power; water conservation, including demand offsets; and energy conservation techniques.

Recommended Zoning Amendments:

- Add Section 15.9 Sustainability Incentives as follows (see next page):

Continued on next page

15.9 Sustainability Incentives

The inclusion of sustainable elements may be applied to increase the maximum lot coverage permitted.

15.9.1 Eligibility

All proposed uses except for single-family and duplex uses that are not included in a subdivision application shall be eligible for a lot coverage increase as permitted by this section.

15.9.2 Review

The review of project scoring and awarding of the incentive shall be conducted by the reviewing authority (Commission or Zoning Enforcement Officer) for the permit or application type required for the proposed use.

15.9.3 Coverage Increase

The maximum lot coverage shall be increased by the following amount based upon a project's score:

Points Earned	Coverage Increase Permitted
500-999	5%
1,000-1,499	10%
1,500-1,999	15%
2,000-2,499	20%
2,500+	25%

15.9.4 Maintenance and Improvements

A. Projects shall be built and maintained in good faith. Elements of the project receiving points shall be maintained for the life of the project but may be improved to a higher, more sustainable standard.
B. Failure to maintain elements of a project awarded points shall result in the project being non-conforming with the coverage standards of these regulations if the project exceeds the coverage limit of the zoning district in which it is located.
C. Projects shall be subject to periodic inspection by the Zoning Enforcement Officer to ensure adequate maintenance of sustainable elements for which points have been awarded.

15.9.5 Scoring

A. Calculation of Score: Scoring shall be conducted in accordance with the table below. Points earned shall be multiplied by the sustainability factor, which shall equal the score for each item. The award is based upon the total score, which is a sum of the score for each item.
B. Documentation: The applicant is responsible for providing documentation that confirms the performance of the proposal in accordance with the scoring matrix and shall submit a scoring matrix with calculations completed. The Commission or Zoning Enforcement Officer may request additional data, calculations, or professional certification to confirm the score(s) provided by the applicant prior to increasing the permitted lot coverage.

Sustainability Element	**Points**	**Sustainability Factor** (multiply points by this factor to determine score)
LEED	Points shall be awarded in accordance with projects designed to meet the following LEED certification levels: Certified=70, Silver=80, Gold=90, Platinum=100	5
Tree Cover	1 point for each 1% of lot area with contiguous tree cover	5
Native Plants	1 point for each 1% of shrubs and trees that are CT native plants as listed on the UCONN Plant Database	1
On-Site Capture of Stormwater	1 point for each 1% of stormwater captured on-site during ten-year storm event.	2
On-Site Solar	1 point for each 1% of energy use to be supplied by solar	2
Geothermal Heating and Cooling	1 point for each 1% of heating and cooling to be supplied by a geothermal source.	2
Gray Water	1 point for each 1% of site water use provided by gray water	2
Pervious, Porous, or Permeable Pavement*	1 point for each 1% of pavement surface comprised of pervious, porous, or permeable pavement.	1
Green Roof*	1 point for each 1% of roof area covered by a green roof	1
Electric Vehicle Charging	1 point for each 1% of parking spaces provided with an electric vehicle charger	2
Bicycle Parking	1 point for each 1% of bicycle parking spaces (indoor or outdoor) relative to vehicular parking spaces (for example, if 100 parking spaces are provided and 10 bicycle spaces are provided, 10 points are awarded)	2
Dark Sky Compliance	1 point for each 1% of outdoor fixtures that are Dark Sky Approved by Dark Sky International	1
*Projects claiming a coverage offset as permitted by Sections [insert reference to green roof and pervious surface coverage offsets if approved] shall not be awarded points for green roofs or pervious, porous, or permeable pavement.		

Date: 8/12/2024

Recommendation 15: Provide Riparian Corridor Protection Regulations

Purpose: Expand protections for riparian corridors and to better protect those resources, the associated habitats, and water quality of the Long Island Sound.

Description: The intent of this regulation is to better regulate and prohibit development in close proximity of the Pequabuck River.

Geographic Extents: All zoning districts

Potential Impacts: Multiple properties/structures will become non-conforming thus limiting expansion of those properties within riparian zones. The improvement of existing structures that do not expand ground area coverage within the riparian zone would be permitted.

Context: The State of Connecticut requires that communities take action to protect the water quality of the Long Island Sound and waterbodies with connections to the Sound. WestCOG's "The Case for Riparian Corridor Protection" documents the importance of protecting riparian zones and their role in the water quality of the Long Island Sound. In other states, such as Massachusetts, the Massachusetts Rivers Act establishes a 200-foot-wide riparian zone on each side of rivers and streams that restricts development in those areas with the exception of single-family homes and associated accessory uses. The riparian zone is 25 feet in a small number of urban communities.

Recommended Zoning Amendments:

1. Provide a new section: Section 15.8 Riparian Corridor Protection (see next page).

Continued on next page

15.8 Riparian Corridor Protection

These regulations establish a riparian zone along the Pequabuck River to protect the water quality of the river and associated habitats. Properties and projects subject to these regulations may also be subject to the Inland Wetlands and Watercourses Regulations of the Conservation Commission of the City of Bristol.

15.8.1 Riparian Zone Boundaries

The riparian zone shall be 25 feet as measured from the mean annual high-water line or from the visible edge of the Pequabuck River if a mean annual high-water line cannot be determined.

15.8.2 Prohibited Uses in Riparian Zone

The following uses shall be prohibited within the riparian zone:

A. Principal buildings, additions to existing buildings, or detached accessory buildings including but not limited to garages and sheds.
B. Impervious surfaces including but not limited to paved parking areas, driveways, athletic courts, terraces, and pools.

15.8.3 Permitted Uses in Riparian Zone

The following uses shall be permitted in the riparian zone provided that the zone is not disturbed, filled, or improved except in support of the permitted use:

A. Any activity for the purposes of environmental impact mitigation or restoration activities including, but not limited to, stormwater management, habitat management, riparian zone restoration or wetland restorations.
B. Boat facilities, public trails, and greenways.
C. Agricultural activities permitted by Connecticut General Statutes Section 22a-40.
D. Construction and operation, by water companies (as defined by Section 16-1 of Connecticut General Statutes) or by municipal water supply systems (as provided for in Chapter 102 of the Connecticut General Statutes) of dams, reservoirs and other facilities necessary to the impounding, storage and withdrawal of water in connection with public water supplies except as provided in Sections 22a-401 through 22a-410 of the Connecticut General Statutes.

15.8.4 Existing Uses

Uses and structures within the riparian zone existing as of [insert date of adoption] shall be considered conforming with these regulations but structures and impervious surfaces may not be expanded in area within the riparian zone.

Date: 8/12/2024

Recommendation 16: Update Soil and Erosion Control Regulations.

Purpose: Update the regulations to provide references to current State guidelines.

Description: Provide updated references to the 2024 Connecticut Guidelines for Soil Erosion and Sediment Control. Remove references to the Connecticut Stormwater Quality Manual, which is not directly applicable to this section.

Geographic Extents: All zoning districts

Potential Impacts: None

Context: The State has recently updated its Guidelines for Soil Erosion and Sediment Control, which became effective in 2024.

Recommended Zoning Amendments:

1. Update Section 15.1.1 as follows (text to be added in red, text to be removed in ~~strikethrough~~):

> **15.1.1 Purpose**
>
> This Section is designed to further the purposes set forth in Section ~~22a-326~~ **22a-329** of the Connecticut General Statutes relative to soil conservation in the State of Connecticut

2. Update Section 15.1.5 as follows and remove reference to the Stormwater Quality Manual as it contains no guidance on soil erosion and sediment control (text to be added in red, text to be removed in ~~strikethrough~~):

> **15.1.5 Erosion and Sediment Control Plan**
>
> A Soil Erosion and Sediment Control Plan (hereinafter referred to as a "Control Plan") shall contain proper provisions to adequately control accelerated erosion and sedimentation and to reduce the danger from storm water runoff on the proposed site based on the best available technology. For methods and practices necessary for certification, **Chapter 3 of** the "Connecticut Guidelines for Soil Erosion and Sediment Control ~~(2002)~~ **(2024)**" as amended, published by the Connecticut Council on Soil and Water Conservation~~, as well as the "Connecticut Stormwater Quality Manual (2004)", as may be amended,~~ shall be utilized.

Date: 8/12/2024

Recommendation 17: Amend Removal of Earth Materials and Filling of Land Regulations.

Purpose: Improve language of the regulations for removal of earth materials and filling of land to provide more clarity.

Description: Amend multiple items in Section 15.2 Removal of Earth Materials and Section 15.3 Filling of Land.

Geographic Extents: All zoning districts

Potential Impacts: None

Context: N/A

Recommended Zoning Amendments (text to be added in red, text to be removed in ~~strikethrough~~):

1. Amend Section 15.2.2 General Provisions as follows to provide more clarity:

~~A. Except as otherwise provided herein, there shall be no removal of earth materials from any property in any zoning district.~~

A. The removal of earth materials shall be conducted in accordance with Sections 15.2.3 through Section 15.2.7 below.

2. Amend Section 15.2.3 as follows to refer to the proper permit type:

15.2.3 ~~Temporary~~ Zoning Permit for Earth Removal up to 400 Cubic Yards

B. Where a bona fide construction project, as evidenced by an approved Site Plan, an approved subdivision plan or a valid Building Permit, requires the removal from the property of not more than 400 cubic yards of earth materials, the Zoning Enforcement Officer may issue without a bond a ~~temporary~~ **Zoning** Permit for earth removal. Such permit shall be valid for a period of 60 days. Such time period may be extended once by the Zoning Enforcement Officer for an additional period of 60 days.

C. The Zoning Enforcement Officer may issue without a bond, a ~~temporary~~ **Zoning** Permit to excavate and move up to 1,500 cubic yards of earth materials in any zoning district to an adjacent property, provided public roads shall not be used. Such permit shall be valid for a period of 60 days.

3. Amend Section 15.2.5.B as follows to apply the buffer area requirement only to earth removal operations, not to the removal of earth material associated with site development:

B. Buffer ~~Areas~~ area requirement for Earth Removal Operations.

4. Amend Section 15.2.6.E to require reporting over a full 12-month period and refer to proper permit type.

E. Every 12 months after the approval of a Special Permit for earth removal, the applicant shall submit to the Commission information prepared, signed and sealed by a surveyor and an engineer registered and licensed to practice in the State regarding the progress of the operation, including the amount of material removed, existing contours and cross-sections in the area excavated during the preceding ~~six-month~~ **12-month** period. Failure of the applicant to provide the Commission with such information within 30 days after the end of the 12-month period shall be deemed sufficient cause for the Commission to revoke the ~~Temporary~~ **Zoning** Permit.

5. Amend Section 15.3.1 General Provisions as follows to provide clarity regarding the requirement for filling of land:

A. The filling of land shall require ~~the~~ **Site Plan** approval ~~of~~ **by** the Commission, in accordance with Section 16.3, unless:

1. the filling shall be for the express purpose of preparing the land for immediate development in accordance with an approved subdivision plan or an approved Site Plan, or

2. the amount of fill to be deposited shall be less than 400 cubic yards in any 12-month period, or the deposit shall be one of topsoil for the purpose of improving an agricultural use.

Eliminate Item B and renumber the subsequent items:

~~B. Except as otherwise provided herein, the filling of land shall be subject to Site Plan approval in accordance with Section 16.3 and with the requirements of this Section.~~

Date: 8/12/2024

Recommendation 18: Update Stormwater Management Regulations

Purpose: Update regulations to provide updated references, more clarity regarding process, and provide updates recommended by the City's Stormwater Management Plan.

Description: Provide references to the 2024 Connecticut Stormwater Quality Manual and add maintenance plan requirements as recommended by the City's Stormwater Management Plan.

Geographic Extents: All zoning districts

Potential Impacts: None

Context: The State has recently updated its Stormwater Quality Manual, which became effective in 2024.

Recommended Zoning Amendments (text to be added in red, text to be removed in ~~strikethrough~~)**:**

1. Update Section 15.5.3 as follows to reference the 2024 Connecticut Stormwater Quality Manual:

15.5.3 Requirements

A. Unless modified by the Commission by Special Permit as provided for in Section 15.5.4 below, any development within the City of Bristol shall implement the following provisions of Chapter 7 of the ~~2004~~ **2024** Connecticut Stormwater Quality Manual (CSQM), as may be amended:

1. Pollutant Reduction as provided in ~~Section 7.4~~ **Standard 1** of the CSQM.
2. Groundwater Recharge and Runoff Volume Reduction as provided in ~~Section 7.5~~ **Standard 1** of the CSQM.
3. Peak Flow Control for the 2-year, 10-year, 25-year, 50-year, and 100-year storm events as provided in ~~Section 7.6~~ **Standard 2** of the CSQM ~~(and the LID appendices)~~ **and Chapter 5**.

B. In the design of a stormwater management system, design professionals may utilize low impact development techniques as contained in the Connecticut Stormwater Quality Manual ~~(2004)~~ **(2024)**, as may be amended.

2. Add the following items recommended by the City's Stormwater Management Plan, to Section 15.5.3 Requirements:

C. All Site Plan and Special Permit applications involving stormwater infrastructure shall provide and require compliance with a long-term maintenance plan and schedule to ensure the performance and pollutant removal efficiency of privately owned retention ponds, detention ponds and other stormwater basins that discharge to or receive discharge from Bristol's municipal separate storm system (MS4) including short-term and long-term inspection and maintenance measures to be implemented by the property owner.

D. The City is authorized to carry out all inspections, surveillance and monitoring procedures necessary to determine compliance with these regulations and the requirements of the City's MS4 program.

3. Revise Section 15.5.4 Modifications to improve clarity regarding required process.

15.5.4 Modifications

The Commission may, ~~by Special Permit~~ **in the course of a Site Plan or Special Permit approval**, modify the requirements of this Section provided that adequate information has been submitted by the applicant to evaluate the request and:

Date: 3/24/2025

Recommendation 28: Convert the BT Overlay Zone to a Base Zoning District

Purpose: Simplify the regulations and zoning map, reduce potential confusion caused by overlapping standards, and amend permitted uses to prohibit uses not appropriate to the zone.

Description: This recommendation would create a new base zoning district named the Residential Transition Zone (RT-5) that allows most uses currently permitted in the R-15 and BT zones, with the similar permit requirements, adopting the lot standards of the BT zone for the new zone. The following principal uses, which are allowed in the R-15, but which are not compatible with the BT zone would be prohibited in the RT-5: brewpubs, cemeteries, commercial greenhouses, farms, golf courses, manufactured home parks, microbreweries, nurseries, seasonal camps and cottages, and stables.

Geographic Extents: Existing BT zone

Potential Impacts: None

Context: The BT is an overlay zone of the R-15 zone surrounding the Downtown. It is intended to allow limited commercial uses, higher density development, and reduced minimum lot standards. The BT zone was likely adopted to provide relief from R-15 standards that were overly stringent for the range of uses, density of uses, and lot sizes and standards found near the Downtown.

Recommended Zoning Amendments:

1. Replace Section 2.1.8 BT Downtown/Neighhorhood Transition Zone with the as following:

> **2.1.8 RT Residential Transition (RT-5) Zone**
>
> The RT-5 Zone is intended to accommodate a transition of uses and residential densities between downtown Bristol and its adjacent residential neighborhoods, while maintaining the existing residential neighborhood appearance of the area.

Continued on next page

2. Add the RT-5 Zone to the Section 4.1 Principal Use Summary Table with allowed uses and permit requirements as follows (currently permitted uses that would no longer be permitted are identified in ~~strikethrough~~ text):

Principal Use	RT-5
Adaptive Reuse of Non-Residential Buildings	SP
Adult Day Care Center	SP
~~Brewpub~~	~~SP~~
Business or Professional Office	SP
~~Cemetery~~	~~SP~~
Child Care Center	SP
Civic Facility	SP
~~Commercial Greenhouse~~	~~SP~~
Community Residence	ZP
Community Youth Organization	SP
Conversion of Historic Dwellings	SP
Conversion to Three-Family	ZP+S
Conversion to Two-Family	ZP+S
Cultural Institution	SP
Emergency Housing Shelter	SP
~~Farm~~	~~ZP~~
Funeral Home or Mortuary	SP
General Medical or Surgical Hospital	SP
~~Golf Course~~	~~SP~~
Group Child Care Home	ZP
~~Manufactured Home Park~~	~~SP~~
Medical Office	SP
~~Microbrewery~~	~~SP~~
Mixed-Use Development	SP
Non-Profit Private School	SP
~~Nursery~~	~~SP~~
Nursing or Convalescent Home	SP
Park or Open Space	ZP/ZP+S
Personal Service Establishment	SP
Public Utility Building or Facility	SP
Religious Organization or Institution	SP
Residential, Single-Family	ZP
Residential, Three-Family	ZP
Residential, Two-Family	ZP
Restaurant, Sit-Down	SP
~~Seasonal Camps and Cottages~~	~~SP~~
Senior Housing	SP
Social Services Agency or Charitable Institution	SP
~~Stable~~	~~SP~~
Specialty Food or Beverage Establishment	SP
Specialty Retail	SP
Unified Residential Development	SP

3. Add the RT -5 Zone to the Section 5.1 Accessory Use Summary Table with allowed uses and permit requirements as follows (currently permitted uses that would no longer be permitted are identified in ~~strikethrough~~ text):

Accessory Use	RT-5
Accessory Buildings and Structures	ZP
Accessory Buildings for Animals	ZP
Accessory Dwelling Unit	ZP
Antennae or Communications Structure	ZP/SP[1]
Family Child Care Home	ZP
~~Farm Stand~~	~~ZP~~
Ground-Mounted Solar Panels	ZP+S
~~Hobby Kennel~~	~~SP~~
Home-Based Business or Home Office	ZP
Keeping of Fowl	ZP
~~Keeping of Livestock~~	~~ZP~~
Off-Street Parking	ZP
Parking Structures	SP
Signs	ZP
Sports Courts	SP
Swimming Pool	ZP

4. Add the RT -5 Zone to the Section 6.1 Temporary Use Summary Table with allowed uses and permit requirements as follows:

Temporary Use	RT-5
Tag Sales	ZP
Temporary Structure	R
Construction Trailer	R
Mobile Vending Unit	R

5. Remove the BT zone and associated content from Section 4.2 Principal Use Summary Table: Commercial, Industrial, and Mixed-Use Districts, Section 5.2 Accessory Use Summary Table: Commercial, Industrial, and Mixed-Use Districts, Section 6.2 Temporary Use Summary Table: Commercial, Industrial, and Mixed-Use Districts.

6. Add the RT-5 zone to the Section 7.1 Lot, Coverage, and Setback Standards: Residential Districts table with the following standards:

Standard	RT-5
A) Minimum Lot Area (sf)	5,000
B) Minimum Lot Frontage (ft)	50
C) Minimum Front Yard (ft)	5
D) Maximum Front Yard (ft)	15
E) Minimum Side Yard (ft)	6
F) Minimum Rear Yard (ft)	15
G) Maximum Building Height (ft)	40
H) Maximum Building Coverage (%)	40
I) Maximum Impervious Coverage (%)	80

7. Eliminate Section 9.3 BT- Downtown/Neighborhood Transition Zone (Overlay Zone) including Subsection 9.3.1 and 9.3.2. Create a new Section 7.4 RT-5 Zone and relocate existing Section 9.3.3, 9.3.4, 9.3.5, and 9.3.6 to that section as Sections 7.4.1, 7.4.2, 7.4.3, and 7.4.4 respectively. Update references within those sections from "BT" zone to "RT-5" zone.
8. Update or remove references to the BT zone across other sections of the zoning regulations as appropriate including Sections 3.4, 4.3.9, 5.4.12, 13.6, and 14.6.4.
9. Amend the Official Zoning Map of the City of Bristol to show the RT-5 zone in place of the BT Overlay of the R-15.

Date: 3/24/25

Recommendation 29: Amend A- Multifamily Residential Zone Regulations

Purpose: Update the regulations for consistency with other residential zones.

Description: Remove outdated cross-references and vague affordability requirements, all additional accessory uses allowed in other residential zones.

Geographic Extents: A Zone

Potential Impacts: None

Context: The A zone is a multifamily base zoning district with standards that are unique to the district.

Recommended Zoning Amendments:

1. Amend Section 7.2.4 to remove reference to content that had been removed from the zoning regulations by amendment in 2022 as follows (text to be added in red, text to be removed in ~~strikethrough~~):

> A. Single-family dwellings developed under this provision shall not be subject to the ~~provisions~~ building spacing requirements of Section 7.2.1.C. ~~General Requirements items C, D, or E.~~

2. Amend Section 7.2.4 Single-Family Subdivisions to remove Item C as follows (text to be removed in ~~strikethrough~~ text):

> ~~C. At the time of subdivision, the developer shall present to the Planning Commission a program for establishing and maintaining the affordability of the single-family dwellings for a period of at least ten years.~~

3. Amend Section 5.1 Accessory Use Summary Table: Residential Districts to allow within the A Zone Antennae or Communications Structure by Zoning Permit or Special Permit (shown as ZP/SP[1]) and Parking Structures by Special Permit (SP).

Date: 3/24/25

Recommendation 30: Update OSD Zone District Type References

Purpose: Correct reference to the zone type of the OSD zone in its purpose statement and in its regulations.

Description: Change reference of an OSD zone in Section 2.1.4 from an "overlay zone", to a "floating overlay" zone.

Geographic Extents: OSD, not geographic implications

Potential Impacts: None

Context: Overlay zones are fixed to the zoning map and are effective as supplemental regulations to the base zoning district, which is referred to as the underlying zone. Floating zones may be approved and applied on top of or in replacement of a base zoning district.

Recommended Zoning Amendments:

1. Amend Section 2.1.4 as follows with new text shown in red and text to be removed shown in ~~strikethrough~~:

> **2.1.4 OSD Open Space Development Zone**
>
> The OSD Open Space Development Zone is a floating overlay zone that ~~an overlay zone of the R-15, R-25 and R-40 zones~~ is intended to accommodate alternative forms of residential development which:
>
> *Remaining content to remain as is*

2. Amend title of Section 9.1 to read as follows: OSD – Open Space Development Zone (Floating Overlay Zone)

Date: 3/3/25

Recommendation 31: Amend the Unified Residential Development/Mixed-Use Standards of the BT Zone.

Purpose: Amend bulk, area, and height standards to be more consistent with the development density that is feasible for the district and more consistent across development densities thresholds that are permitted for URD/Mixed-Use developments.

Description: Amend Section 9.3.3 Unified Residential Developments and Mixed-Use Developments and Section 9.3.4 Area, Dimensional, and Amenity Requirements for Unified Residential Developments and Mixed-Use Developments to better align with standards for the BT zone and to be more consistent with development form that is feasible for the district and more consistent across development densities that are permitted.

Geographic Extents: BT Zone

Potential Impacts: Impacts are unlikely as development density is already limited by factors such as off-street parking requirements.

Context: Unified Residential and Mixed-Used Development are permitted in the BT zone at densities that exceed other forms of residential development.

Recommended Zoning Amendments:

1. Reduce permitted densities established in Section 9.3.3.B as follows (new text show in red, deleted text in ~~strikethrough~~):

> A. By Special Permit, the Commission may allow the maximum density of a unified residential development or mixed-use development in the BT zone to be greater than 22 dwelling units per acre, subject to the following provisions:
> 1. A project that complies with all of the "Level 1" requirements specified in Section 9.3.4 shall be eligible for a maximum density of ~~32~~ 26 dwelling units per acre.
> 2. A project that complies with all of the "Level 2" requirements specified in Section 9.3.4 shall be eligible for a maximum density of ~~36~~ 30 dwelling units per acre.
> 3. A project that complies with all of the "Level 3" requirements specified in Section 9.3.4 shall be eligible for a maximum density of ~~40~~ 34 dwelling units per acre.

2. Reduce the maximum building height for Level 3 development in Section 9.3.4 from 45 feet to 40 feet to be consistent with the permitted height in the BT Zone and across other density levels.
3. Reduce the maximum building coverage of Level 2 development from 65% to 60% and Level 3 development from 75% to 70% to provide more consistent increases between density levels.

Date: 3/24/2025

Recommendation 33: Convert the RM Overlay Zone to a Base Zoning District

Purpose: Simplify the regulations and zoning map, reduce potential confusion caused by overlapping standards, and amend permitted uses to prohibit uses not appropriate to the zone.

Description: This recommendation would create a new base zoning district named the Mixed-Residential Zone (RM-5) that allows most uses currently permitted in the R-10, R-15 and RM Overlay zones, with the same permit requirements, adopting the lot standards of the RM zone for the new zone. The following principal uses, which are allowed in the R-10 and R-15 but which are not compatible with the RM zone would be prohibited in the RM-5: commercial greenhouses, farms, golf courses, manufactured home parks, nurseries, seasonal camps and cottages, and stables.

Geographic Extents: Existing RM Overlay zone

Potential Impacts: None

Context: The RM is an overlay zone of the R-10 and R-15 zones. It is intended to allow two- and three-family uses, higher density development, and reduced minimum lot standards. The RM zone was likely adopted to provide relief from R-10 and R-15 standards that were overly stringent for the range of uses, density of uses, and lot sizes and standards found in the areas it covers.

Recommended Zoning Amendments:

1. Replace Section 2.1.2 RM Mixed Residential Zone with the as following:

> **2.1.2 RM Mixed Residential Zone (RM-5) Zone**
>
> The RM Mixed Residential Zone is intended to accommodate a variety of housing types including single-family and two- and three-family dwellings on small lots.

Continued on next page

2. Amend the RM Zone uses in the Section 4.1 Principal Use Summary Table (rename the zone to "RM-5" at the top of the column) to remove commercial greenhouses, farms, golf courses, manufactured home parks, nurseries, seasonal camps and cottages, and stables as permitted uses (as indicated by ~~strikethrough~~ text below):

Principal Use	RM-5
Adaptive Reuse of Non-Residential Buildings	SP
Adult Day Care Center	SP
Business or Professional Office	SP
Cemetery	SP
Child Care Center	SP
Civic Facility	SP
~~Commercial Greenhouse~~	~~SP~~
Community Residence	ZP
Community Youth Organization	SP
Conversion of Historic Dwellings	SP
Cultural Institution	SP
~~Farm~~	~~ZP~~
General Medical or Surgical Hospital	SP
~~Golf Course~~	~~SP~~
Group Child Care Home	ZP
~~Manufactured Home Park~~	~~SP~~
Medical Office	SP
Non-Profit Private School	SP
~~Nursery~~	~~SP~~
Nursing or Convalescent Home	SP
Park or Open Space	ZP/ZP+S
Personal Service Establishment	SP
Public Utility Building or Facility	SP
Religious Organization or Institution	SP
Residential, Single-Family	ZP
Residential, Three-Family	ZP
Residential, Two-Family	ZP
~~Seasonal Camps and Cottages~~	~~SP~~
Senior Housing	SP
Social Services Agency or Charitable Institution	SP
~~Stable~~	~~SP~~
Unified Residential Development	SP

3. Amend the RM Zone uses in the Section 5.1 Accessory Use Summary Table (rename the zone to "RM-5" at the top of the column) to remove farm stands, hobby kennels, and keeping of livestock as permitted accessory uses (shown in ~~strikethrough~~ text):

Accessory Use	RM-5
Accessory Buildings and Structures	ZP
Accessory Buildings for Animals	ZP
Accessory Dwelling Unit	ZP
Antennae or Communications Structure	ZP/SP[1]
Family Child Care Home	ZP
~~Farm Stand~~	~~ZP~~
Ground-Mounted Solar Panels	ZP+S
~~Hobby Kennel~~	~~SP~~
Home-Based Business or Home Office	ZP
Keeping of Fowl	ZP
~~Keeping of Livestock~~	~~ZP~~
Off-Street Parking	ZP
Parking Structures	SP
Signs	ZP
Sports Courts	SP
Swimming Pool	ZP

4. Rename "RM" to "RM-5" in Section 6.1 Temporary Use Summary Table.
5. Add the RM-5 zone to the Section 7.1 Lot, Coverage, and Setback Standards: Residential Districts table with the following standards:

Standard	RM-5
A) Minimum Lot Area (sf)	5,000
B) Minimum Lot Frontage (ft)	50
C) Minimum Front Yard (ft)	15
D) Minimum Side Yard (ft)	6
E) Minimum Rear Yard (ft)	15
F) Maximum Building Height (ft)	40
G) Maximum Building Coverage (%)	40
H) Maximum Impervious Coverage (%)	80

6. Eliminate Section 9.2 RM- Mixed Residential Zone (Overlay Zone) including Subsection 9.2.1 and 9.2.2. Create a new Section 7.3 RM-5 Mixed Residential Zone and relocate existing Section 9.2.3 to that section as Section 7.3.1.
7. Update or remove references to the RM zone across other sections of the zoning regulations as appropriate including Section 13.6.
8. Amend the Official Zoning Map of the City of Bristol to show the RM-5 zone in place of the RM Overlay of the R-10 and R-15.

Date: 3/24/25

Recommendation 34: Allow Accessory Dwelling Units in Detached Structures

Purpose: Provide more flexibility in the development of Accessory Dwelling Units (ADUs) to help address housing needs in the city.

Description: ADUs are a permitted form of housing in Bristol but are not permitted in accessory structures. This recommendation would allow existing accessory structures to be repurposed for and ADU use or new ADUs to be constructed as detached structures.

Geographic Extents: All zones where permitted.

Potential Impacts: May result in the conversion of existing structures to ADUs or the construction of new ADUs.

Context: ADUs provide an affordable housing option. They are a housing type often referred to as "missing middle housing".

Recommended Zoning Amendments:

1. Amend Section 5.4.3 as follows (text to be added in red, text to be removed in ~~strikethrough~~)

5.4.3. Accessory Dwelling Unit

A. Permitted only as accessory to a single-family dwelling either within the principal structure or within an existing or new detached accessory structure.

B. Only one accessory unit is permitted per principal dwelling unit.

~~C. Must be located within the principal dwelling structure. Shall not be located in an accessory structure.~~

C. Accessory dwelling unit shall have a maximum net floor area of 1,000 square feet, a maximum of two bedrooms, and shall not exceed 50% of the floor area of the principal dwelling.

D. The accessory dwelling unit shall be self-contained, with separate cooking, sanitary and sleeping facilities for the exclusive use of the occupant.

E. No exterior change shall be made to the front of the principal dwelling that would change its appearance from that of a single-family dwelling.

F. Detached Accessory Structures shall comply with the following:

   a. Shall not be located closer to the street line of the front yard than the principal structure.

   b. Shall be located a minimum distance from a side or rear yard property line equal to the maximum height of the structure or the minimum required yard, whichever is less.

   c. If located within a required yard, a landscaped buffer shall be provided between the ADU and adjacent property line on the side that is within the required yard.

   d. There shall be no ADU entrance located within a required yard.

Date: 3/25/25

Recommendation 27: Cannabis Cultivation

Purpose: Regulate the cultivation of cannabis so as to permit only within indoor locations in the Industrial and Industrial Park zones and to provide adequate controls on their establishment to control potential nuisances associated with such use.

Description: Add cannabis cultivation and micro-cultivation as defined and authorized by Connecticut General Statutes Section 21a-420 as a Special Permit use in the Industrial zone, and Industrial Park Zones. Allow indoor cultivation only; prohibit outdoor cultivation.

Geographic Extents: Industrial zone, Industrial Park 1, 3, and 25 zones.

Potential Impacts: May result in establishment of a cannabis cultivation facility in the IP-1 or IP-25 zone. Location of such use in the I or IP-3 is unlikely given the residential zone distancing requirement and the size of those zones relative to their proximity to residential zones. May result in the establishment of a cannabis micro-cultivation facility in the I, IP-1, IP-3, or IP-25 zones.

Context: The zoning regulations currently lack regulations or restrictions on cannabis establishments permitted under Connecticut General Statutes Section 21a-420. Without regulations specific to cannabis establishments, establishments may locate in zones where similar non-cannabis establishments may be located. Multiple cities and towns in Connecticut permit Cannabis cultivators with varying restrictions on their location and operations. Below is a summary of regulations from five municipalities:

Town or City	Distancing Requirement from Residential Zone or Use	Distancing Requirement from Schools, Churches, Parks and other Sensitive Uses	Distancing Requirement from other Cannabis Cultivators	Other
East Hartford	none	none	none	Police and Fire Department approvals. Odor monitoring and mitigation
New Britain	100 feet	200 feet	1,000 feet	Security Plan Requirement
Rocky Hill	200 feet	200 feet	1,000 feet	
Southington	750 feet	750 feet	1,000 feet	
Waterbury	none	500 feet	2,000 feet	Security Plan, Odor Abatement Plan Requirement

Recommended Zoning Amendments:

1. Amend the Section 4.2 Principal Use Summary Table to including "Cannabis Cultivation" and "Cannabis MicroCultivation" as Special Permit uses in the I, IP-1, IP-3, and IP-25 zones.
2. Add new section 4.3.24 Cannabis Cultivation and Micro-Cultivation as follows:

4.3.24 Cannabis Cultivation and Micro-Cultivation

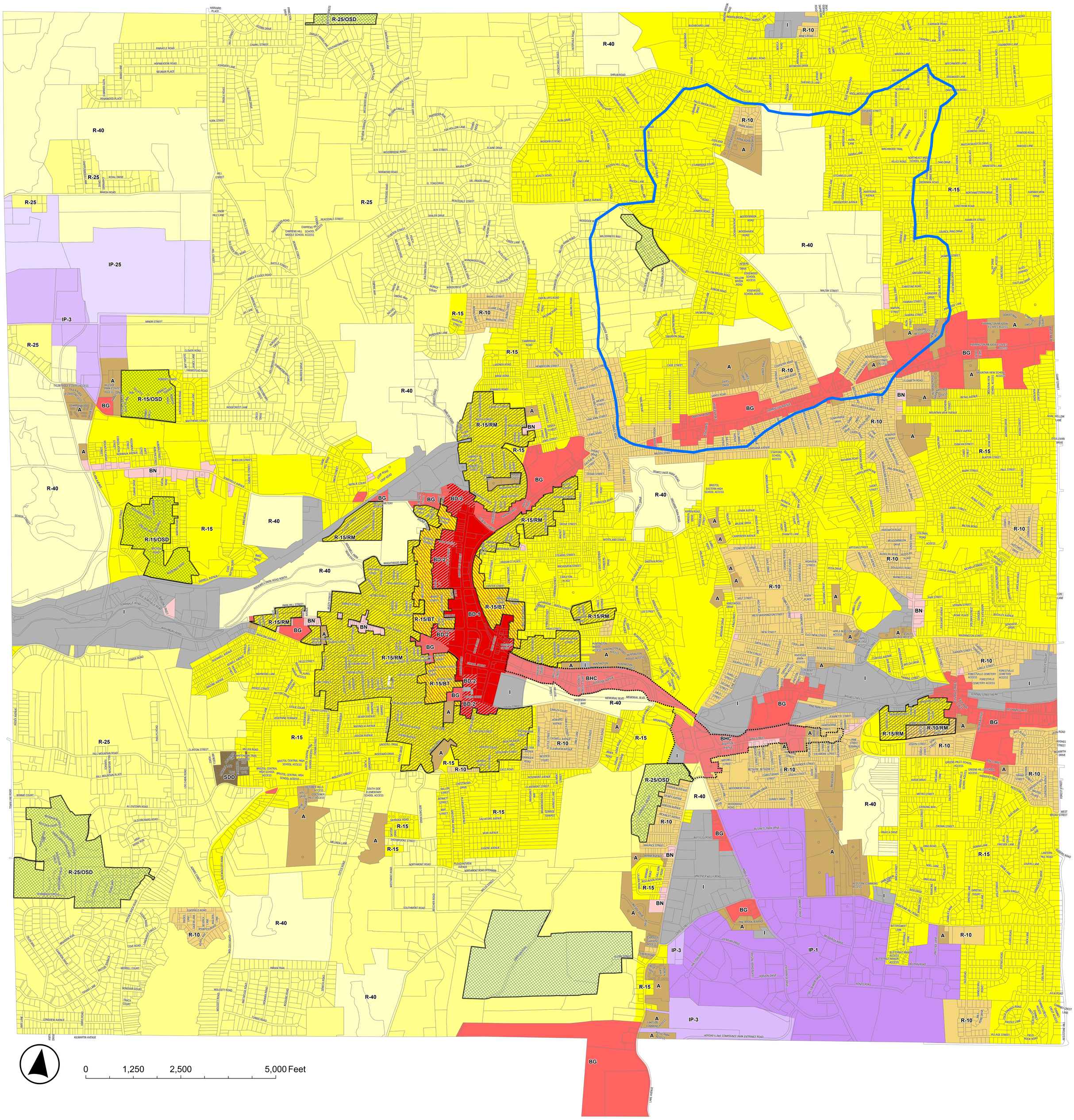
A. All Cannabis cultivators and micro-cultivators are subject to Article VIII of the City of Bristol Code of Ordinances.
B. Cannabis cultivation and cannabis micro-cultivation shall only be permitted as indoor uses. The outdoor cultivation of cannabis is prohibited within the City of Bristol.
C. Cannabis cultivation facilities shall be located at least 500 feet from a residential zone. Micro-cultivation facilities shall be located at least 250 feet from a residential zone. The distance requirement shall be measured by taking the nearest straight line between the facility building and the zoning boundary.
D. Consistent with Section 13-125 of the City of Bristol Code of Ordinances, no cannabis cultivator or micro-cultivator shall be permitted to operate on a site that is within 250 feet of any school, church, hospital, municipal park or municipal recreational facility as measured by taking the nearest straight line between the respective lot boundaries of said sites. The establishment of one of these uses within 250 feet of an existing cannabis cultivator or micro-cultivator shall not cause the cultivator or micro-cultivator to be non-conforming.
E. No cannabis cultivator or micro-cultivator shall be located within 1,000 feet of another cannabis cultivator or micro-cultivator. The distance requirement shall be measured by taking the nearest straight line between the respective lot boundaries of the sites.
F. The facility shall not generate waste or emissions that result in adverse environmental impacts to surrounding properties and mitigation measures shall be taken to control the generation of odor.
G. The Police Department shall review and approve a proposed security plan for the facility prior to granting of a Special Permit.
H. The Fire Marshal Office/Fire Department shall review and approve the planned location(s) for the storage of fertilizers associated with cannabis production and proposed fire detection and suppression systems prior to granting of a Special Permit.
I. The applicant shall have received a provisional license (or equivalent) approval from the Connecticut Department of Consumer Protection prior to granting of a Special Permit.

3. Add new the following definitions of Cannabis Cultivator and Micro-Cultivators to the Section 19 Use Definitions:

Cannabis Cultivation: A facility run by a person that is licensed to engage in the cultivation, growing and propagation of the cannabis plant at an establishment with not less than fifteen thousand square feet of grow space per CGS Section 21a-420, as amended.

Cannabis Micro-Cultivation: A facility run by a person licensed to engage in the cultivation, growing and propagation of the cannabis plant at an establishment containing not less than two thousand square feet and not more than ten thousand square feet of grow space, prior to any expansion authorized by the Commissioner of Consumer Protection per CGS Section 21a-420, as amended.

City of Bristol Official Zoning Map



Residential Zones

- R-40 Single-Family Residential Zone
- R-25 Single-Family Residential Zone
- R-15 Single-Family Residential Zone
- R-10 Single-Family Residential Zone
- A Multi-Family Residential Zone
- SDD* Special Development Zone
  *Zone deleted under prior zoning regulations

Street names are shown for informational purposes only.

Business Zones

- BN Neighborhood Business Zone
- BHC Route 72 Corridor Business Zone
- BG General Business Zone
- BD-1 Downtown Business Zone
- BD-2 Downtown Business Zone

Industrial Zones

- IP-25 Industrial Park Zone
- IP-3 Industrial Park Zone
- IP-1 Industrial Park Zone
- I General Industrial Zone

Overlay Zones/Areas

- OSD Open Space Development
- RM Mixed Residential Overlay Zone
- BT Downtown/Neighborhood Transition Overlay Zone
- Access Management Overlay Zone
- Level "A" Aquifer Protection Area
  (1) Upper and Lower White Bridge & Mix Street
  (Effective Date: 5/27/11)

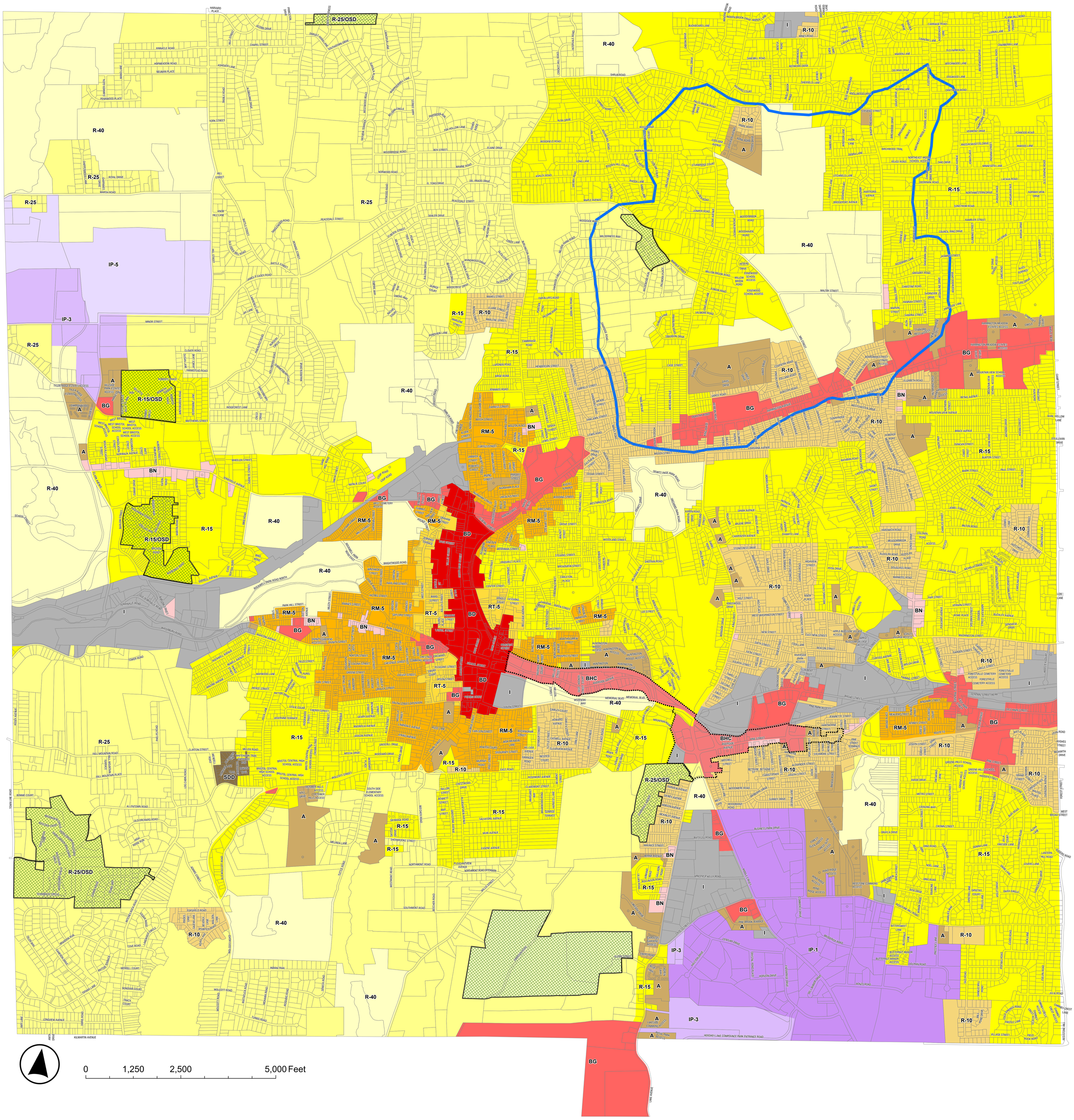
Effective Date: December 21, 1990
Digital Format Adopted On: May 11, 2011
Base Information Last Updated On:
Amended To:
Map Printed On:

Chair, Bristol Zoning Commission

CITY OF BRISTOL CONNECTICUT SEAL

Draft 4/3/25

City of Bristol Official Zoning Map



Residential Zones

- R-40 Single-Family Residential Zone
- R-25 Single-Family Residential Zone
- R-15 Single-Family Residential Zone
- R-10 Single-Family Residential Zone
- A Multi-Family Residential Zone
- RM-5 Mixed Residential Zone
- RT-5 Residential Transition Zone
- SDD* Special Development Zone
  *Zone deleted under prior zoning regulations

Street names are shown for informational purposes only.

Business Zones

- BN Neighborhood Business Zone
- BHC Route 72 Corridor Business Zone
- BG General Business Zone
- BD Downtown Business Zone

Industrial Zones

- IP-5 Industrial Park Zone
- IP-3 Industrial Park Zone
- IP-1 Industrial Park Zone
- I General Industrial Zone

Overlay Zones/Areas

- OSD Open Space Development
- Access Management Overlay Zone
- Level "A" Aquifer Protection Area
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