



QUINNIPIAC RIVER WATERSHED WATER QUALITY REGULATION REVIEW

Prepared by:

THE LAND USE COLLABORATIVE

**A PARTNERSHIP AMONG THE CONNECTICUT LAND USE LEADERSHIP ALLIANCE PROGRAM,
YALE SCHOOL OF FORESTRY AND ENVIRONMENTAL STUDIES AND THE LAND USE LAW
CENTER AT THE ELISABETH HAUB SCHOOL OF LAW AT PACE UNIVERSITY**

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1. INTRODUCTION



The thirty-eight miles of the Quinnipiac River extend from the headwaters on the New Britain/Farmington border to New Haven Harbor and the Long Island Sound. Over its history, the River has served the citizens of Connecticut as an abundant source of fish and oysters and has played an important role in the industrialization of Connecticut – a role from which it has been recovering though years of focus on eliminating point-source pollution and reducing non-point source pollution. Twentieth century Federal and state legislation governing clean water and water pollution control have contributed to the recovery of the River’s water quality and environmental function, but stewardship and protection of the River remain high priorities. The significant authority reposed in cities and towns by the Legislature places water quality protection squarely in their control and it is in recognition of that broad authority that this study was performed.

Municipal land use plans and regulations shape the development patterns within a watershed and can play a significant role in protecting water quality and other natural resources at a watershed scale. These locally-adopted documents include municipal plans of conservation and development, municipal ordinances, zoning regulations, subdivision regulations, inland wetland and watercourses regulations, stormwater regulations, flood damage prevention regulations, and aquifer protection regulations, all of which influence or regulate the development that can occur within a watershed. Local regulations, by their definition, can vary by municipality within a watershed, and regulations are periodically revised in response to local or regional development pressure, shifts in attitude toward natural resource protection, and political and socioeconomic factors.

The purpose of this watershed-based review is to identify municipal regulatory and planning mechanisms currently in place that can affect development within the Quinnipiac River watershed. The regulatory and non-regulatory mechanisms of eleven municipalities within the Quinnipiac River Watershed – Bristol, Cheshire, East Haven, Meriden, New Haven, North Haven, Plainville, Prospect, Southington, Wallingford, and Wolcott – were reviewed for their potential impact on development within the watershed. The review considered existing rules, goals, strategies and regulation requirements that affect land use, impervious cover, open space, flooding, runoff and erosion, water quality and other natural resources such as wetlands, watercourses, biodiversity, and drinking water. Summaries of each municipality’s existing regulations, plans, and policies affecting watershed development are tabulated in the appendices to this Report.

The following Report shows how the various commissions, regulations, and planning documents of each municipality are relevant to watershed-level management, and how they each can work in complement to one another in order to support long-term protection of the

watershed. By consolidating all of the tools across the watershed into a single document, and evaluating them for sound watershed management, this Report highlights best practices, commonalities, and gaps in watershed protection that may not be apparent otherwise. This process affords an opportunity for communities to become familiar with the regulatory standards and methodologies of neighboring municipalities; to compare and evaluate the relative merits of different approaches; and to improve and facilitate watershed-wide consistency.

2. MUNICIPAL LAND USE GOVERNANCE

The regulatory schemes of local municipalities exert the most direct influence on land use and watershed development within their political boundaries. Municipal mechanisms affecting such development include zoning, site plan review, subdivision review, sediment and erosion control, wetland and watercourse protection, vegetation protection, open space preservation, stormwater management, aquifer protection, and flood prevention. Land use mechanisms are administered by various Town commissions, boards, and agencies, whose titles and responsibilities can vary across municipalities. Table 2-1 below summarizes the relevant municipal agencies for the Quinnipiac River Watershed.

Table 2-1. Land Use Commissions by Municipality

Municipality	Land Use Governing Body
Bristol	• Aquifer Protection Agency • Energy Consumption Task Force • Historic District Commission • Inland Wetlands and Watercourses Agency/Conservation Commission • Parks Commission • Planning Commission • Zoning Board of Appeals • Zoning Commission
Cheshire	• Environment Commission • Energy Commission • Historic District Commission • Inland Wetlands and Watercourse Commission • Parks and Recreation Commission • Planning and Zoning Commission • Water Pollution Control Authority • Zoning Board of Appeals

East Haven	• Flood and Erosion Control Board • Inland Wetland Commission • Planning and Zoning Commission • Recreation and Athletic Commission • Zoning Board of Appeals
Meriden	• Conservation Commission • Flood Control Implementation Agency • Inland/Wetlands and Watercourse Commission • Zoning Commission • Planning Commission • Recreational Facilities Task Force • Public Lands and Parks Dedication Committee • Zoning Board of Appeals
New Haven	• City Plan Commission/Inland Wetlands • Flood Damage Prevention District • Historic District Commission • Livable City Initiative • Parks and Recreation • Board of Alders (Zoning Commission by Special Act of the Legislature) • Board of Zoning Appeals
North Haven	• Conservation Commission • Inland Wetlands Commission • Parks and Recreation Commission • Planning and Zoning Commission • Zoning Board of Appeals
Plainville	• Aquifer Protection Agency • Clean Energy Task Force • Conservation Commission • Inland Wetland Commission • Planning and Zoning Commission • Zoning Board of Appeals
Prospect	• Anti-Blight Commission • Conservation Commission • Inland Wetlands Commission • Planning and Zoning Commission • Sidewalk Taskforce • Zoning Board of Appeals • Water Pollution Control Authority

Southington	• Conservation Commission • Inland Wetland and Watercourses Agency • Parks Commission • Planning and Zoning Commission • Board of Water Commission • Zoning Board of Appeals
Wallingford	• Energy Conservation Committee • Conservation Commission • Historic Properties Commission • Inland Wetlands and Watercourses Commission • Plan of Conservation and Development Implementation Committee • Planning and Zoning Commission • Recreation Commission • Zoning Board of Appeals • Quinnipiac River Linear Trail Advisory Committee
Wolcott	• Blight Citation Hearing Board • Inland Wetlands Commission • Planning and Zoning Commission • Sewer-Water Commission • Zoning Board of Appeals

Municipal agencies rely on a number of sources for their land use authority affecting watershed development, which also vary by municipality. Tables 2-2 and 2-3 below summarize the local sources of land use control and planning policies within the Quinnipiac River Watershed by municipality, including the year they were adopted and last revised.

Table 2-2. Sources of Land Use Mechanisms by Municipality and Year Adopted

	Town Code	Zoning	Subdivision	Inland Wetlands	Floodplain Management
Bristol	1975, amended 2017	1990, amended 2017	1996, amended 2009	1973, amended 2009	2008
Cheshire	1975, amended 2017	1970, amended 2017	1971, amended 2017	1974, amended 2010	In zoning
East Haven	1982, amended 2016	2001, amended 2016	2001	In zoning	In zoning
Meriden	1963, amended 2016	1983, amended 2014	1950, amended 2011	In zoning	1982, amended 1996
New Haven	1962, amended 2017	1995, amended 2016	In zoning	In zoning	In zoning
North Haven	1981, amended 2015	2007, amended 2017	2007, amended 2017	1974, amended to 1997	2013
Plainville	1975, amended 2016	2010, amended 2012	2004, Amended 2014	1974, amended 2012	In General Code and zoning
Prospect	1947, amended 2017	1962, amended 2017	2009, amended 2013	1974, amended 2013	In zoning
Southington	1972, amended 2017	1957, amended 2017	1956, amended 2016	1974, amended 2007	In zoning
Wallingford	1999, amended 2016	1985, amended 2017	1987, amended 2011	In zoning	In zoning
Wolcott	Re-codification - 2018 (e)	amended 1999	amended 1998	1974	1982, amended 2011

Table 2-3. Sources of Land Use Mechanisms and Planning Policies by Municipality and Year Adopted

Municipality	Plan of Conservation and Development	Open Space Preservation	Phase II Stormwater Management
Bristol	2000, amended 2015	2000, amended 2015 (in PCD)	2017
Cheshire	2002, amended 2016	2005	2017
East Haven	2007	2007 (in PCD)	2017
Meriden	2009	2009 (in PCD)	2016
New Haven	2015	In zoning	2010
North Haven	2005	2005 (in PCD)	2016
Plainville	2009	2009 (in PCD)	2017
Prospect	2009, amended 2014	2014 (in PCD)	2017
Southington	2006, amended 2016	2016 (in PCD)	2016
Wallingford	2016	2016 (in PCD)	2017
Wolcott	2011	2011 (in PCD)	

3. SUMMARIES OF MUNICIPAL REGULATORY CONTROLS

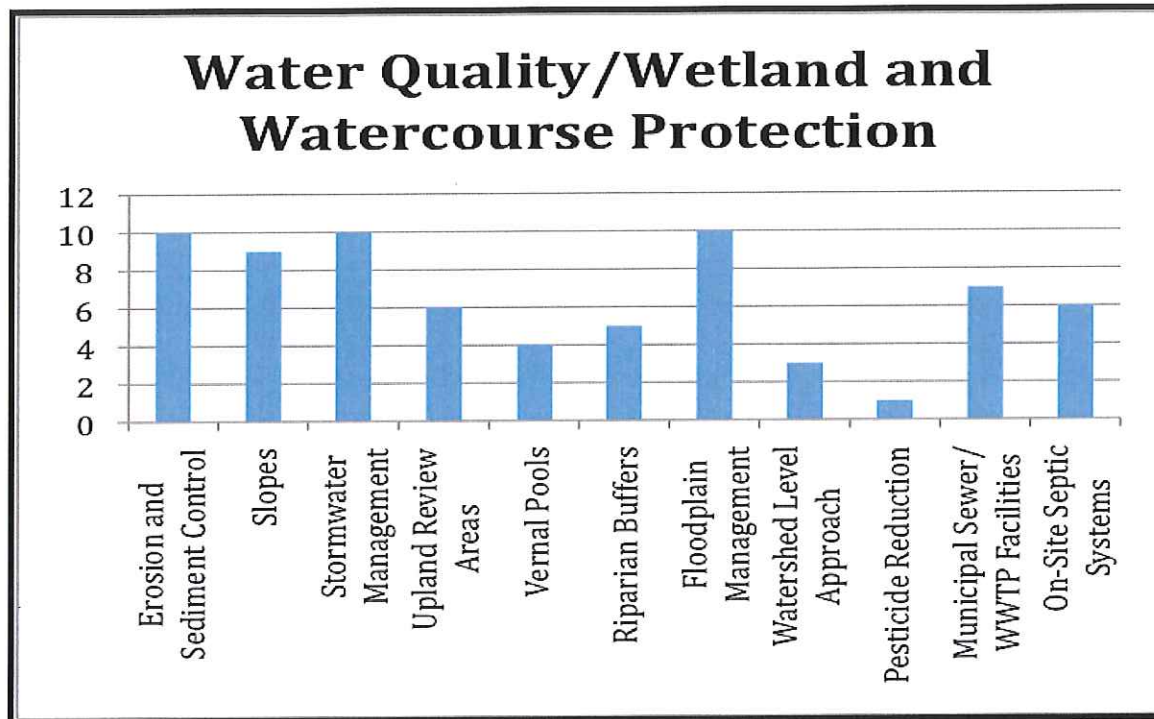
In the following sections, we summarized the relevant land use regulations, plans, and policies of the watershed municipalities in the Quinnipiac River Watershed, separated into four major categories: (1) Water Quality/Wetland and Watercourse Protection; (2) Historic Preservation, Cultural Landscapes, and Biodiversity; (3) Drinking Water/Aquifers; and (4) Land Use.

3.1 Water Quality/Wetland and Watercourse Protection

The first section of the audit focused on specific mechanisms relating to water quality within the watershed, including stormwater and sewer systems and pesticide use. This section also focused on natural features and processes that can affect water quality, including slopes, vernal pools, riparian buffers, floodplains, and erosion and sedimentation.

Although varying greatly in depth and scope and in accordance with state law, every municipality has implemented some version of Soil Erosion and Sediment Control Plan, Stormwater Management Plan, and Floodplain Management Plan requirements. Furthermore, most municipalities prefer property owners and developers to connect to the

public sewer system as much as feasible, and many municipalities discourage the use of on-site septic systems, either by outright banning their use or allowing them only under certain circumstances with approval. Finally, most municipalities recognize the importance of slopes, usually through regulation of their creation during construction processes, but also through consideration or regulation of steep slope areas during site plan approval.



Best Practices

Soil Erosion and Sediment Control Plan: Cheshire. The Town of Cheshire has adopted Erosion and Sediment Control Plan regulations, like most municipalities, but Cheshire has emphasized soil erosion and sedimentation control with references throughout its regulations, plan, and policies and by explicitly requiring certification of SESC Plans by the Planning and Zoning Commission in connection with certain applications. Thus, Cheshire has encouraged prevention of soil erosion and sediment run-off at almost every phase of development within its borders. Furthermore, Cheshire includes its Erosion and Sediment Control Plan regulations in both its zoning and subdivision regulations, thereby making it readily available to developers at all phases of their project.

Upland Review Areas: Plainville. The Town of Plainville not only authorizes review of upland areas within its wetlands regulations, but also includes the DEEP Guidelines for Upland Review Areas as an Appendix to them. Additionally, there is an explicit requirement in the subdivision regulations to include upland review areas in proposed subdivision maps as well as a prohibition in its Subdivision Regulations from placing tree and limb debris in wetlands and upland review areas. These requirements ensure that the Planning and Zoning Commission is made aware of any relevant upland areas and that the areas are protected in all phases of development.

Watershed-Level Approach to Regulations: Wallingford. The Town of Wallingford's zoning regulations contain an overlay zone specifically intended to protect the water quality within the watershed. The Watershed Protection (WPD) District contains additional conditions, standards, and safeguards, such as collection and treatment of stormwater runoff, to ensure that areas of the municipality that are particularly important to watershed health are adequately protected.

Gaps

Upland Review Areas. Most municipalities recognize the value of a 100-foot upland review area in their wetlands regulations. Upland activities can significantly affect the health of a watershed given the direct impact on water quality through runoff and nonpoint source pollution. In its Ridgeline Protection Overlay Zone, the Town of Plainville has included specific protection of the groundwater recharge function of traprock ridges and requires developers to demonstrate that groundwater quality and recharge potential of a proposed development are preserved post-development. The commission reserves the right to regulate the storage, handling or use of hazardous materials or waste, including fertilizers, pesticides and herbicides in the Overlay Zone.

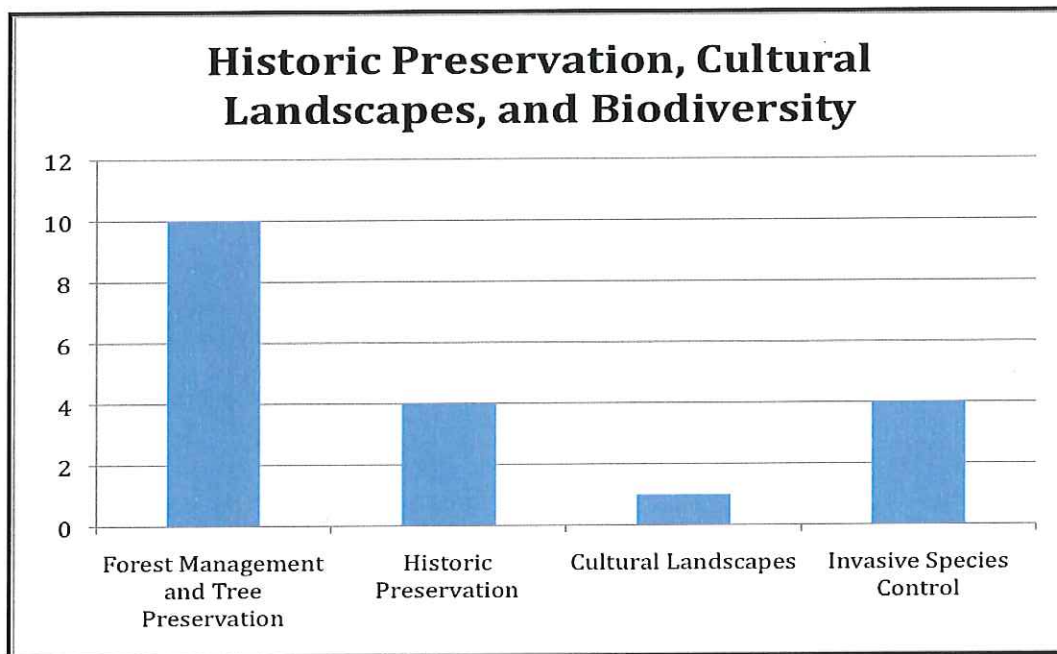
Watershed-Level Approach to Regulations. As illustrated by the many regulatory and planning mechanisms analyzed herein, every municipality has mechanisms that affect the watershed in some capacity. However, very few municipalities have specifically recognized the need for watershed protection overall (see discussion of Wallingford above). Without recognition of the interconnected watershed system as a whole, piecemeal regulations affecting individual aspects are not sufficient for its protection. Thus, adopting a mechanism that requires consideration and protection of the watershed as a system will help to bridge the gaps in its protection. Assembling the stakeholders along the Quinnipiac to discuss water quality would be a constructive opener for a collaborative approach.

Pesticide Reduction. No municipalities within the watershed have placed limitations on pesticide use, and only one municipality even contemplates pesticide use within its regulations. Given the pervasive and long-lasting nature of pesticide chemicals, and their direct impairment of water quality, the overall health of the watershed would greatly benefit from placing limits on areas in which pesticides can be freely applied, such as prohibiting their use in ecologically significant or vulnerable areas.

3.2 Historic Preservation, Cultural Landscapes, Biodiversity

The next major category within the audit focused on historic and cultural preservation, as well as tree and native species preservation, all of which can affect development patterns and biodiversity within the watershed.

Most municipalities have adopted regulations that promote tree preservation in public places, especially including prohibitions on tree injury and removal in public parks and playgrounds. Many municipalities have also provided for monetary penalties if these regulations are violated.



Best Practices

Forest Management and Tree Preservation: Bristol. The City of Bristol has a comprehensive tree ordinance that designates a Tree Warden, who is responsible for the preservation of all trees in public spaces, and also lists specific acts that cannot be performed without approval from the Tree Warden. Furthermore, the City of Bristol promotes sound forest management through its zoning regulations. The City only allows timber harvesting through special permit applications in which the applicant must describe the existing forest, including the present mix of tree species, and a forest management plan along with a plan for re-vegetation. This regulation gives Bristol the ability to regulate tree preservation on private forestland, so as to ensure that there are no negative environmental impacts from tree removal and harvesting within its jurisdiction.

Forest Management and Tree Preservation: Cheshire. The Town of Cheshire includes tree protection measures across multiple regulatory sources, thereby incorporating consideration of tree preservation in most of its approval processes. Most notably, Cheshire's zoning regulations encourage landscape designs that preserve existing native tree species, and also require consideration of potential impacts on forests when the Planning and Zoning Commission is deciding on a wireless communication application. Furthermore, Cheshire's subdivision regulations and POCD both emphasize tree preservation as essential to maintaining an ecological balance and protecting the general health and welfare of its constituents.

Gaps

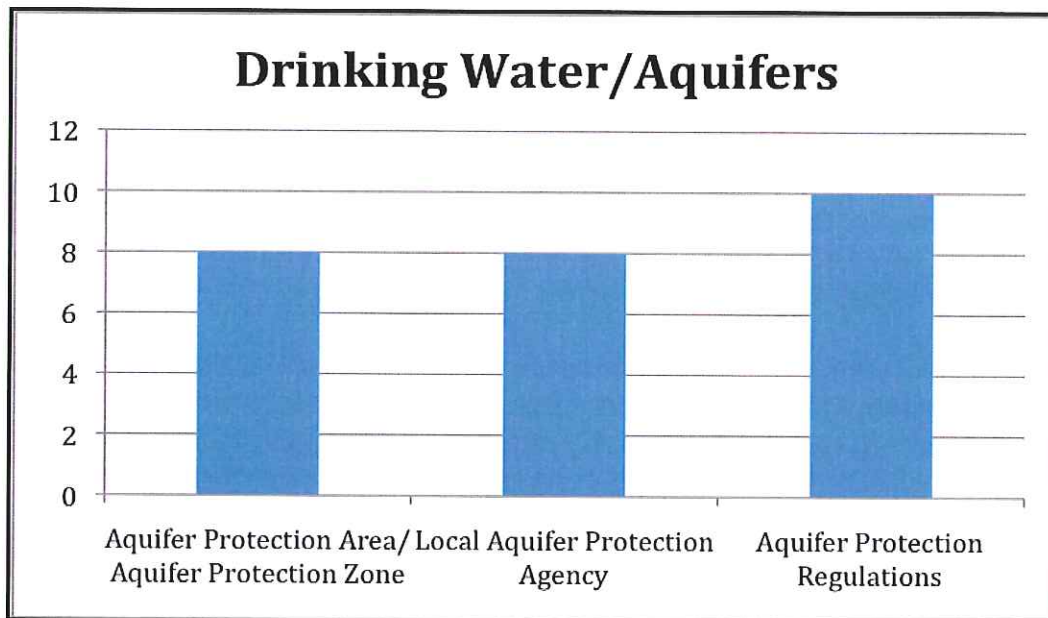
Cultural Landscapes. Despite the scenic nature of the Quinnipiac Watershed region, no municipality's regulatory sources contain notable recognition of its cultural landscapes. Recognizing the historic and cultural qualities of the land itself within this region, either through a municipality's POCD or zoning regulations, would help to preserve the quality of the watershed as a whole.

Invasive Species Control. While some municipalities make mention of preferring native species wherever feasible, there are no robust invasive species control mechanisms enforced in any municipality. The interconnected nature of the watershed provides invasive species with an easy path of proliferation throughout the region. For that reason, it is in every municipality's best interest to curb invasive species introduction wherever feasible. For example, a municipality's subdivision regulations could require that the applicant only plant native species as much as possible.

3.3 Drinking Water/Aquifers

This section of the audit focused on drinking water quality and aquifer protection, including the location and protection of aquifers within each municipality. Since groundwater can greatly influence the health of surface waters, groundwater aquifer protection is very important when assessing regulations affecting the watershed.

Most municipalities have adopted some form of aquifer protection within their jurisdictions in accordance with the requirements of the Connecticut Aquifer Protection Act. However, the depth of these regulations varies greatly.



Best Practices

Aquifer Protection Regulations: North Haven. The Town of North Haven's aquifer protection regulations provide clear, specific information as to what activities are prohibited in the APA zones, and what activities are allowed by special permit only. This specificity provides easily digested regulations to developers, which protects the aquifer zones from harmful development but does not go so far as to discourage development altogether.

Aquifer Protection Area Designation/Zone Regulation: Meriden. Like most municipalities in the watershed, and in accordance with state law, the City of Meriden has adopted Aquifer Protection Areas through depicting Aquifer Protection zones on its Zoning Map. However, Meriden also includes the Aquifer Protection Zones of abutting municipalities on its Zoning Map. Therefore, any developer that looks to the Meriden Zoning Map is on notice of any aquifer within the area, regardless of whether or not it is within Meriden's borders. This reinforces the interconnected nature of the watershed system in this area, and encourages a more holistic approach to water quality considerations in the development process.

3.4 Land Use

The final category addressed any remaining land use and planning mechanisms relevant to development within the watershed, including mechanisms regarding low impact development, impervious cover, design review, and open space.

There are many common themes across this category. For example, all municipalities provide for bond requirements, limits on minimum buildable area, and some mechanisms with respect to open space. Furthermore, most municipalities have specific design review standards in their zoning and/or subdivision regulations, and many of them encourage consideration of low impact development. Finally, most provide for planned residential developments and mixed land use to some extent.

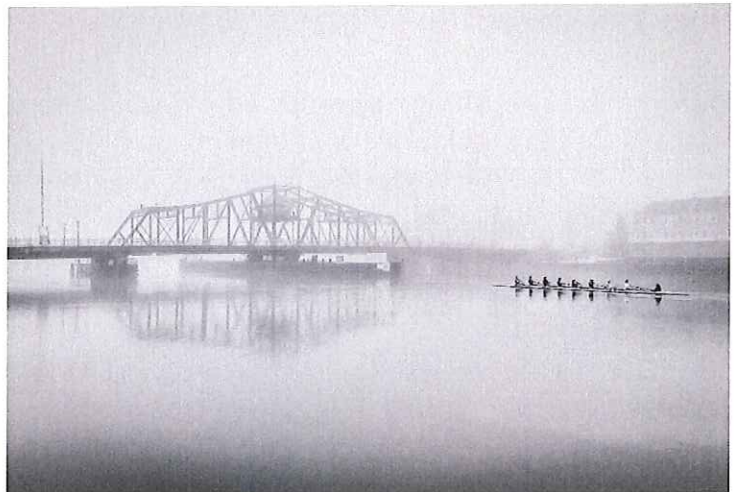
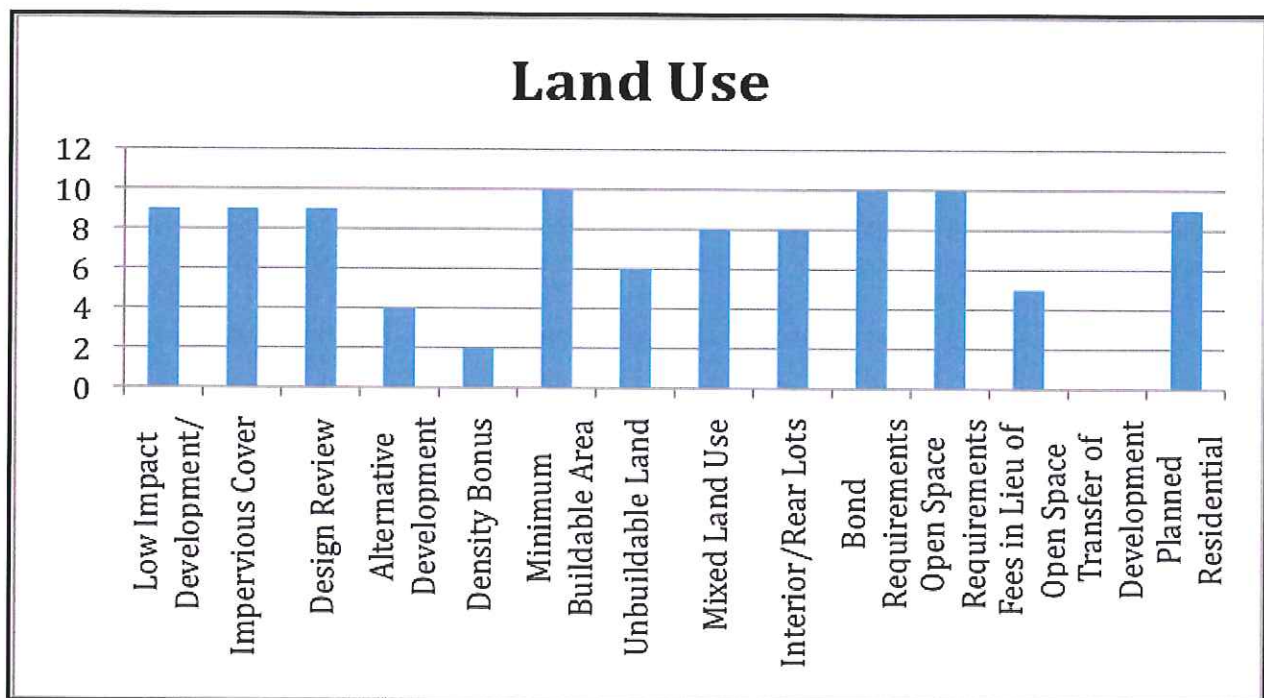


Photo by Ian Christmann



Best Practices

Planned Residential Development: East Haven. Like many municipalities, the Town of East Haven's zoning regulations contain a planned development district floating zone, which can be applied for through the Planning Commission. However, East Haven's planned development district is unique because it is tied specifically to its Shoreline Development Area. This area is an additional district overlapping other districts, as specified in its zoning map, which contains specific development goals. Thus, the town of East Haven has created a highly regulated mechanism that allows for approval of appropriate development in an ecologically sensitive area, and also requires that the applicant show that there is no other feasible area for the project to be located.

Low Impact Development/Green Infrastructure: Plainville. While many municipalities within the watershed *encourage* low impact development (LID), the Town of Plainville *requires* low impact development in compliance with its published design manual on LID. The regulations focus on improvement of water quality through promoting conservation measures, reducing impervious cover, reducing and cleansing runoff, and overall pollution prevention. The Manual itself provides an in-depth technical framework of LID strategies, with anticipated application to all development projected proposed in Plainville.

Gaps

Density Bonus. Only a couple of municipalities provide for a density bonus, whereby developers are incentivized to develop in a certain manner by allowing them to build more units if they meet certain conditions. Density bonuses specifically tailored to watershed protection could be used to encourage developers to develop in an environmentally sound

way. For example, density bonuses could be provided where developers agree to provide open space within a certain distance from surface waters, or where developers agree to collect and treat runoff from any impervious surfaces they create.



Photo by Ian Christmann

Transfer of Development Rights. No municipality within the watershed has implemented a mechanism for transfer of development rights. Such a mechanism can be extremely useful to discourage excessive development in ecologically sensitive areas, by allowing property owners realize the appreciation of their property value by transferring their rights of development to receiving zones for building in areas that are more suitable. Thus, creation of such mechanisms in the Quinnipiac River Watershed could help

municipalities protect vulnerable areas of the watershed system.

Hazard Mitigation Plans. In connection with its Natural Hazard Mitigation Plan Update II in 2017, the City of New Haven identifies periodic review and repair of existing bulkheads and revetments along the Quinnipiac River as an integral element in protecting water quality in the event of flooding. The 100-year floodplain is primarily commercial and industrial through the River's length in New Haven though the Quinnipiac Meadows, an environmentally sensitive area (in New Haven, Hamden and North Haven) is a focal point for both ecological restoration and economic development.

APPENDICES

The following pages contain the audit tables for each municipality. It should be noted that the tables are based solely upon electronically available information for each municipality. Furthermore, the audit is the result of a collaborative effort across multiple organizations spanning a few years of information gathering, which explains any discrepancies in depth that may be apparent across the tables below.

BRISTOL

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Code of Ordinances	Ch. 8 Flood and Erosion Control - Adopts the provisions of sections 25-84 to 25-94 inclusive of the General Statutes of CT, pertaining to flood and erosion control. - Designates the city council as the flood and erosion control board for the city.
	Zoning Regulations	Sec. IX.A Soil Erosion and Sediment Control Regulations - No development in the disturbed area of which is cumulatively more than one-half acre in area shall be undertaken in any zoning district without certification under this section. - Exemption: A single-family dwelling that is not part of a subdivision of land shall be exempt from this Section. - A Soil Erosion and Sediment 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. - Said Control Plan shall include a narrative and a development plan, as well as any other information deemed necessary. - Site development shall not begin unless the Control Plan has been certified and a bond has been posted. - Inspection shall be made by the Commission during the development to ensure compliance with the certified Control Plan. The Commission may require the permittee to verify through progress reports that measures have been taken according to the certified Control Plan.

	Sec. IX.B Removal of Earth Materials: - As part of the Special Permit application, the applicant shall submit a soil erosion and sediment control plan. Sec. IX.E Harvesting of Timber - As part of the special permit application, the applicant shall submit a soil erosion and sediment control plan, prepared in accordance with the standards of "A Practical Guide for Protection Water Quality While Harvesting Forest Products," prepared by the CT RC&D Forestry Committee, 1990. Sec. X Special Permits - In granting a Special Permit, the Commission may attach conditions and safeguards such as soil erosion and sediment control measures.
	Subdivision Regulations - An application for subdivision approval must include a Soil Erosion and Sediment Control Plan. Sec. 4.01(8) Soil Erosion and Sediment Control Plan - See Sec. IX of Zoning Regulations.
	Inland Wetland & Watercourse Regulations Sec. 4.2 Permitted Uses as of Right and Nonregulated Uses - Conservation of soil and minor work to control erosion is permitted as a nonregulated use in wetlands and watercourses, provided they do not disturb the natural and indigenous character of the wetland or watercourse. Sec. 7.4 Application Requirements - Addition measures may be required for a significant activity, such as those preventing degradation of water quality and erosion and sedimentation. Sec 11.1.1 General Provisions in the Issuance of all Permits - The permittee shall employ construction management practices to prevent erosion and sedimentation.
SLOPES	Code of Ordinances Ch. 21 Streets, Sidewalks, and Public Places - Pavement patching must meet the existing surface neat and true. - Preliminary plan-profile drawings shall include consideration of slope and grade. - Details specifications for cross slope and intersection grading, as well as side slopes and slopes made during construction.

STORMWATER MANAGEMENT	Zoning Regulations	Sec. IX.B.5 Standards for Removal of Earth Materials - The final grade of any excavated slope shall not exceed one foot of vertical rise per three feet of horizontal distance. The Commission may approve a steeper grade where ledge rock or geological conditions are present, but may require fencing or other protective measures to control hazardous conditions. - The natural topography of the property shall be preserved to the maximum extent possible.
	Subdivision Regulations	Sec. 1.12 Character of the Land - Land which the Commission finds to be unsuitable in its present condition for building purposes because of steep slopes shall not be approved for subdivision unless adequate provisions are made. Sec. 4.01 Standards for Maps and Plans, General Requirements - All subdivision applications require a grading plan, and on lots with difficult topography, the Commission may require that a preliminary lot grading plan be submitted as part of the subdivision plan to show the feasibility of construction. Sec. 5.03 Subdivision Streets - Proposed streets shall be designed relative to existing topography and location, with consideration given to contours and natural features. All streets shall be so arranged as to place as many of the lots as possible at or above the grade of the streets, and subdivider shall prepare and stabilize all slopes made necessary by such street. Sec. 5.08 Storm Drainage - Open drainage shall be in swales of acceptable design with protection to prevent erosion and other damage to the slopes.
	Flood Damage Prevention	Sec. 5.4.3(c) Standards for areas of shallow flooding (AO Zones) On-site drainage for all proposed structures in Zones AO and AH located on slopes shall provide adequate drainage paths to guide floodwaters around and away from such structures.
	Code of Ordinances	Ch. 21 Streets, Sidewalks, and Public Places - It shall be unlawful for any person to use any drain or pipe in such a manner that causes discharge of water upon any sidewalk. Ch. 22 Water, Sewers, and Sewage - Purpose is to ensure the proper construction, operation of public drainage and wastewater facilities. - Defines <i>Storm water</i> as only including water sufficiently clean and unpolluted to be discharged, without treatment or purification, into any natural open stream or watercourse. - Storm water and sanitary sewer shall remain separate, and chapter outlines limitations on what can be discharged through storm sewer system.

	• Art. V – Storm Water Control - In the event that a storm water management facility (i.e. detention pond, retention pond, dam, drainage ditches, storm water drains) becomes necessary for the development and/or long term use and enjoyment of tracts of land, the developer shall develop a plan and provide for an endowment to insure perpetual maintenance and upkeep of said storm water management facility, to be submitted to the city council for review. - Plan cannot be approved until applicants propose an endowment in cash to be turned over to the <i>Bristol Storm Water Control Trust</i> in an amount sufficient to insure its perpetual care. - Creates “<i>The Bristol Storm Water Control Trust</i>” to receive all such endowment funds to care for storm water control areas in perpetuity.
Zoning Regulations	Sec. VI.D Business Zones: BT Downtown/Neighborhood Transition Zone • Encourages the use of low-impact stormwater management techniques, e.g., rain gardens, bio-retention swales Sec. VIII Supplemental Regulations • The stormwater runoff system for all driveways, parking areas and loading areas shall be sized to accommodate runoff from a 25-year flood storm and be designed so as to prevent runoff from flowing into the street or onto adjacent properties. Where feasible, it should be tied into the City’s drainage system. Sec. XI.A Site Plans Requirements and Procedures • If Commission believes that public facilities or the environment may be adversely affected by the proposed development, the Commission may require the applicant to submit an impact analysis of the development upon storm drainage, sanitary sewerage, etc.
Subdivision Regulations	Sec. 2.04 Submission Requirements • A plan for application for subdivision approval should include storm drains, sanitary sewers, catch basins, etc. • Hydrological Report should include design of the storm drainage system, including the Base map used to determine watershed and drainage patterns; downstream runoff areas affected by the storm water runoff from the subdivision; and a plan for the perpetual maintenance and care of any permanent storm water control structures (detention ponds, retention ponds, dams, drainage ditches, storm water drains, etc.).

		Sec. 5.02 Lot Improvements and Access - Individual lot drainage shall be coordinated with the general storm water pattern for the area. - Drainage shall be designed so as to avoid concentration of storm water from each lot onto adjacent lots. Sec. 5.05 Utilities, General Requirements - Proper provision shall be made for water, sewerage and storm water drainage, especially in areas contiguous to brooks, rivers or other bodies of water subject to flooding. Sec. 5.08 Storm Drainage - The subdivider shall be fully responsible for constructing adequate facilities for the control, collection, conveyance and acceptable disposal of storm water, other surface water and subsurface water, whether originating in the subdivision or in a tributary drainage area. - Drainage facilities shall be located within the street right-of-way where feasible, or in perpetual, unobstructed easements of at least 20 feet in width, where necessary. - Specifies design standards of drainage facilities based on size of watershed.
	Inland Wetlands and Watercourse Regulations	Sec. 7.3 Application Requirements - All applications shall include certification of the present flow of storm water for a 25-year storm and the flow which would result from the proposed activity. Sec. 11.11 General Provisions in the Issuance of All Permits - The permittee shall employ construction management practices to control storm water discharges and to prevent erosion and sedimentation and to otherwise prevent pollution of wetlands and watercourses.
UPLAND REVIEW AREAS	Inland Wetland and Waterways Regulations	Sec. 2 Definitions Regulated activity includes any activities within 100 feet of wetlands or watercourses. Since the environmental impact of proposed activity may come from outside the physical boundaries of a wetland or watercourse, the intent is to regulate these adjacent areas as well.
VERNAL POOLS		
RIPARIAN BUFFERS		
FLOODPLAIN MANAGEMENT	Code of Ordinances	Ch. 5 Buildings and Building Regulations No building permit shall be issued for a new residential dwelling unless an approved site and/or plot plan is submitted with the application, showing location of wetlands floodplains.

WATERSHED- LEVEL APPROACH IN REGULATIONS	Subdivision Regulations	Sec. 1.12 Character of the Land - Land which the Commission finds unsuitable due to flooding shall not be approved for subdivision unless adequate provisions are made by the subdivider to mitigate the unsuitability. Sec. 4 Standards for Maps and Plans - Record Subdivision Map and general subdivision map must show floodplains. Sec. 5.05 Design Standards: Utilities - In areas contiguous to brooks, rivers or other bodies of water subject to flooding, proper provision shall be made for protective flood control measures.
	Inland Wetlands and Watercourse Regulations	Sec. 2 Definitions Wetlands definition includes soils that are characteristic of floodplains.
	Flood Damage Prevention	Sec. 1.3 Statement of Purpose - It is the purpose of this ordinance to regulate floodplain development by restricting or prohibiting uses which can exacerbate flood danger. Sec. 3.3 Development Permit - A floodplain development permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities.
	Code of Ordinances	Ch. 21 Streets, Sidewalks and Public Places - Defines <i>watershed</i> as that portion of the land surrounding a watercourse or street which contributes ground and/or surface water into a watercourse or onto a street. - When required by the city engineer, a drainage analysis map of the contributory watershed and downstream runoff area and drainage design computations and criteria shall be submitted.
	Subdivision Regulations	Sec. 2.04 Submissions Requirements - Hydrological Report must include base map used to determine watershed and drainage patterns. Sec. 5.08(2) Design of Storm Drainage Facilities - The design of storm drainage facilities shall be based upon the maximum ultimate development of the watershed as permitted under existing zoning. - For watersheds one square mile and larger, the design shall be based upon a 100-year storm. For watersheds less than one square mile, the design shall be for a 50-year storm.

	Inland Wetland and Watercourse Regulations	Sec. 8 Application Procedures Requires that applicant give written notice of proposed activity to adjacent municipal inland wetlands and watercourses agency if any portion of the wetland or watercourse on which the regulated activity is proposed is within 500 feet of the boundary of an abutting town.
PESTICIDE REDUCTION	Aquifer Protection Area Regulations	Sec. 2 Definitions - Hazardous Material: Any <i>pesticide</i> as defined in § 22a-47 of the CT General Statutes - Regulated Activity definition includes pest control services that involve the storage, mixing, or loading of pesticides or other hazardous material. Sec. 4 – Prohibited and Regulated Activities - All regulated activities shall be prohibited in aquifer protection areas, except any agricultural activity is considered a non-regulated activity.
MUNICIPAL SEWER/WWTP FACILITIES	Code of Ordinances	Ch. 21 Streets, Sidewalks and Public Places - No certificate of occupancy shall be issued to buildings or structures for human occupancy or use unless it is connected to an accepted city sewer and accepted city water main or a subsurface sewage disposal system and on-site underground well approved by the Bristol director of health. Ch. 22 Water, Sewers and Sewage Disposal - Sec. 22.16(b) Definitions - Defines <i>public sewer</i> as the main line of pipe owned, controlled and maintained by a public municipal body, and shall not include house connections or connections between the main sewer and individual properties. - Defines <i>waste water facilities</i> as the structures, equipment and processes required to collect, carry away and treat domestic and industrial wastes and dispose of the effluent. - Defines <i>waste water treatment works</i> as an arrangement of devices and structures for treating sanitary sewage, industrial wastes and sludge. - No private waste water disposal system, sewage discharge or overflow or privy vault shall be constructed, rebuilt, expanded or extended on any premises from which a public sewer is reasonably accessible. If not accessible, then by private waste water disposal systems as approved by the director of health. - All waste water facilities shall be repaired, replaced and maintained by the public works department after acceptance by the city council.

	Zoning Regulations	Sec. V Single-Family Residential Zones, For residential zones and OSD zones, the building shall be served by public sewer and public water systems.
	Subdivision Regulations	Sec. 2.04 Submission Requirements - Application must include documentation that the tract can be connected to an operational public sanitary sewer, or that it has suitable physical characteristics to adequately satisfy all the requirements of both the Bristol-Burlington Health District and the Connecticut Department of Public Health for subsurface sewage disposal. Sec. 5.06 Sanitary Sewers - All sewer construction shall be performed only after issuance of the subdivider's permit for sanitary sewers by the City Engineer. - If accepted City sanitary sewers are located within 500 feet of the subdivision, the subdivider shall extend such sewers to and install them within the subdivision. - If accepted City sanitary sewers are located 500 feet or more from the subdivision, the subdivider may extend them to and install them within the subdivision, or the subdivider shall construct a dry sanitary sewer for future connection when sanitary sewers are extended to that area. - The subdivider shall furnish and install complete in place a suitable underground sanitary sewage pumping station and force main if necessary.
ON-SITE SEPTIC SYSTEMS	Code of Ordinances	Ch. 22 Water, Sewers and Sewage Disposal - Where a public sanitary sewer is not available, the building sewer shall be connected to a private sewage disposal system as specified herein. - Approval in every case must be obtained from the director of health prior to installation of a sewage disposal system. - No septic tank shall without the approval of the director of health be constructed within 75 feet of a well or spring; within 50 feet of a human habitation other than the building served; within 50 feet of a tributary of a water supply reservoir or any ground or surface water drain tributary to such reservoir; within 10 feet of a lot line; nor within 25 feet of any stream, pond, lake or tidal water. No system shall be laid out in areas where high groundwater surface flooding or ledge rock will interfere with its effective operation. The bottom of any leaching area shall be at least 18 inches above maximum groundwater level. - Septic tanks shall be provided for water carriage sewage disposal only where no public sewers are available, and must follow specified requirements.

	Subdivision Regulations	Sec. 5.06(2) On-site Sewers • In areas where on-site sewage disposal systems are proposed, the subdivider shall complete the necessary soil tests as required by the Bristol-Burlington Health District prior to submission of the application for subdivision approval.
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2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Code of Ordinances	Ch. 16 Parks and Recreation - No person shall in any way alter, damage, remove or deface any facility, feature, vegetation, man-made object or equipment in a park; nor erect or store personal property, plant vegetation or deposit debris or refuse in a park or extend any use on adjacent property to park property. - No person shall: remove or pick from a park any plants, flowers or parts thereof; plant any plant or release or cause to be released into a park any plant or fungus seeds or spores; nor disturb nor modify woodlands, streams, stream banks, meadows, ponds, lakes or other natural areas within a park, or walk among or across any flower garden, shrubs or other plantings. Ch. 21 Sec. 12 City of Bristol Tree Ordinance - Provides for the regulation of the planting, maintenance, and removal of trees and shrubs on public property within the city to protect from damage caused by improper planting, maintenance or removal of trees and shrubs located within the city. - Bristol's director of public works is designated as the tree warden, whose duties include enforcing this ordinance. - Specifies acts that cannot be performed on trees without approval from tree warden, including cutting them down, and provides fines for those who violate this ordinance.
	Zoning Regulations	Sec. IX.B.2.j-k - Where feasible during landscaping efforts, <i>existing trees shall be saved</i>; if grading is required in their vicinity, trees shall be appropriately welled or mounded to protect them from damage. No trees five inches or greater in caliper as measured three feet above ground level shall be removed unless so approved by the Commission. Sec. IX.E Harvesting of Timber - Regulates timber harvesting from forest land to promote the sound, long-term management of such land and forest resources; that will maintain the productivity of forest land for forest crops; that will not adversely affect the surrounding neighborhood; and that will protect the land from soil erosion, sedimentation, and other negative environmental impacts.

		• There shall be no timber harvesting operations conducted on any property in any zoning district except by special permit. • As part of the Special Permit application, the applicant must submit a narrative describing the existing forest, including the mix of tree species and a forest management plan, if appropriate, as well as a plan for re-vegetating those areas of the property where large expanses of bare ground may be created as a result of the operation.
HISTORIC PRESERVATION	Code of Ordinances	Ch. 5 Buildings and Building Regulations • Prohibits demolition of historic structures, unless specific demolition permit is granted.
	Overlook Local Historic District – Map and Guidelines for Construction and Alterations	Sec. 1 General • Establishes the Overlook Local Historic District to preserve and protect the unique architectural heritage of a portion of the Federal Hill neighborhood. • Every reasonable effort should be made to provide a compatible use for buildings that requires minimum alteration to the building and its environment, and rehabilitation work should not destroy the distinguishing qualities or character of the property.
	Zoning Regulations	Sec. V.A.7 The Conversion of Existing Historic Dwellings • The conversion, in whole or in part, of existing dwellings listed in the City's Historic Resources Inventory to professional offices and/or additional dwelling units may be allowed in the R-10 or R-15 zones subject to Special Permit and Site Plan and in accordance with certain conditions.
	Plan of Conservation and Development	Sec. 6 Enhance Community Character • Support the preservation of historic resources.
CULTURAL LANDSCAPES		
INVASIVE SPECIES CONTROL		

3. DRINKING WATER AND AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION	Aquifer Protection Area Regulations	Sec. 1.01 Purpose - The regulations make provisions for delineating aquifer protection areas on the city's Zoning Map, to be delineated by the Bristol Zoning Commission. Sec. 3.02 - The Aquifer Protection Area may not be extended without prior written approval of the Commissioner of Energy and Environmental Protection of the State of Connecticut. Sec. 3.03 - The boundaries of the aquifer protection area may only be challenged on the Agency's failure to properly delineate the boundaries in accordance with §22a-354n of the CT General Statutes.
	Zoning Map of the City of Bristol, CT	Level "A" Aquifer Protection Area Comprises limited general business zones along the southern edge (Route 6), limited multi-family residential, and mostly single-family residential zones, as well as the Cooper Mine Brook and the NB Board of Water Commission.
LOCAL AQUIFER PROTECTION AGENCY	Aquifer Protection Area Regulations	Sec. 1.04 The Zoning Commission is the Aquifer Protection Agency.

AQUIFER PROTECTION REGULATIONS	Code of Ordinances	Ch. 18, Art. VII: Aquifer Protection • To protect aquifer protection areas, this section regulates certain land use activities within designated aquifer protection areas. • Prescribes regulated, prohibited, and permitted activities within aquifer protection areas. • Sec. 4.04 - Any party that wants to commence a non-regulated activity within the Area must notify the Agency and complete a form that allows the Agency to determine if the activity is truly non-regulated. • Sec. 6 - Procedures for seeking an exemption from prohibition or regulation. • Sec. 7.01 to 7.06 - Generally, all registrations and permit applications must contain sufficient information and the Agency may request additional information at any time during the review period. • Best Management Practices include hazardous material storage and shipment regulations, including no increase in number of underground storage tanks; no floor drains, dry wells, or other infiltration device that allows the release of waste waters to the ground; a materials management plan shall be developed.
	Subdivision Regulations	Sec. 5.07 Water • A potable, adequate and dependable water supply shall be provided for every lot within the subdivision. • Where public water is not required, a private well may be permitted for each lot, provided that each well can be designed, located and constructed in accordance with the requirements of the Bristol-Burlington Health District.

4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT/ GREEN INFRASTRUCTURE	Zoning Regulations	Sec. VI (D) BT Downtown/Neighborhood Transition Zone • Site and Building Amenities include energy-efficient site lighting on building exteriors, along walkways, and within parking lots; low-impact stormwater management techniques, e.g., rain gardens, bio-retention swales; at least one Level 2 electric vehicle charging station; and at least one on-site source of renewable energy, e.g., solar panels. Sec. X(A) Special Permits Requirements and Procedures • The standards for approving Special Permits include the impact of the proposed use on the natural characteristics of the site and the surrounding environment. Sec. XI(A) Site Plans Requirements and Procedures • <i>Impact Analysis:</i> If Commission believes that public facilities or the environment may be adversely affected by the proposed development, the Commission may require the applicant to submit an impact analysis of the development upon storm drainage, sanitary sewerage, traffic, site conditions and/or water, air or noise pollution.
IMPERVIOUS COVER	Plan of Conservation and Development Zoning Regulations	Sec. 6.3.7 Community Design • Promote the “greening” of Bristol by encouraging the installation and maintenance of appropriate landscaping such as trees and shrubs along streets and public rights-of-way, in public open spaces, and by requiring landscaping in new private developments. Sec. II.B Definitions • <i>Impervious Surface Coverage:</i> The percentage which the ground floor area of all buildings, structures and pavement on a lot bears to the lot area Sec. V.D - A – Multi-Family Residential Zone • Maximum Impervious Surface Coverage – 40% for sites where the maximum density is 8 units per acre; 50% where the maximum density is greater than 8 units per acre.

DESIGN REVIEW	Zoning Regulations	Sec. XI(A) Site Plans Requirements and Procedures - In reviewing and acting upon a Site Plan application, the Zoning Commission must consider such factors as the arrangement of buildings, structures and uses on the site; the adequacy of design of the interior vehicular circulation system; the adequacy of the storm drainage system's design to accommodate any increase in storm water runoff and to minimize soil erosion and sedimentation; and the adequacy of water, sewer and other public facilities to accommodate the development. - No Certificate of Zoning Compliance or Certificate of Occupancy shall be issued until "as-built" drawings have been submitted to the Zoning Enforcement Officer and City Engineer and are determined to be in substantial compliance with the approved Site Plan.
	Subdivision Regulations	Sec. 2.04 Submission Requirements - An application for subdivision approval shall not be considered complete unless all of the following plans and other data have been submitted. Sec. 5.01 Design Standards – General Improvements - Subdivisions, including related streets, drainage and other improvements required by these Regulations, shall be planned, designed and constructed with consideration of the Plan of Conservation of Development, preservation of natural features, and ridgeline preservation.
	Inland Wetlands and Watercourses Regulations	Sec. 7.4 Additional Application Requirements for Significant Activities - Engineering reports and analyses and additional drawings to fully describe the proposed project. Sec. 9 – Public Hearings - public hearing shall be held on all applications involving a significant activity. A public hearing may be held on applications which do not involve significant activities if the agency determines it is in the public interest. All applications and maps and documents relating thereto shall be open for public inspection. Any person may appear and be heard at any public hearing.
ALTERNATIVE DEVELOPMENT DESIGNS	Zoning Regulations	Sec. V.B OSD Open Space Development Zone The OSD - Open Space Development zone is an overlay zone of the R-15, R-25 and R-40 zones intended to accommodate alternative forms of residential development which reduce required minimum lot sizes or provide for the clustering of dwelling units while, at the same time, providing for the preservation of land for open space, recreational and/or other public purposes in an amount greater than would occur in a conventional development.

	Plan for Conservation and Development	Sec. 8.3.2 Promote Mixed Uses Investigate non-industrial alternatives for the re-use of older industrial buildings in downtown Bristol (e.g., artists' lofts; retail stores and restaurants; museums; offices of non-profit, civic and community organizations).
DENSITY BONUS	Zoning Regulations	Sec. V Residential Zones - In any development containing more than 20 acres, the Commission may permit a one percent increase in the base density for each additional one percent in the amount of open space reserved above the 25% minimum, provided that the maximum density increase shall not exceed 25% of the base density. - Under Sec. V(D)(2)(a), a maximum density of 8 dwelling units per acre is allowed in the A-Multi-Family Zone. However, under Sec. V(D)(3)(a), any combination of dwellings at a density greater than 8 units/acre and up to a maximum of 12 units per acre must be permitted subject to the Special Permit and Site Plan approvals of Bristol's Zoning Regulations. - The Zoning Commission may permit an increase in the maximum density if the Commission determines that overriding the maximum density otherwise allowed/required by the regulations is warranted for economic or social reasons and the housing development is owned, operated or sponsored by a governmental agency or by a non-profit housing corporation. Whenever such modifications are granted, the Commission must state the reasons therefor on the record. Sec. VI(D)(5) BT - Downtown/Neighborhood Transition Zone - Unified Residential Development and Mixed Use Developments - If existing non-residential buildings are rehabilitated and re-used as part of a URD or MUD in the BT zone, the project incorporating such buildings is eligible for the maximum density of the <i>next highest level</i>.
MINIMUM BUILDABLE AREA	Zoning Regulations	Appendix A Figure A-6 Diagram of Required Yards and Buildable Area Sec. V - Residential Zones, Sec. VI Business Zones Contains area and dimensional requirements for all zones.
UNBUILDABLE LAND	Zoning Regulations	Sec. IV(A)(13)(g) Unbuildable Lots - The area of the accessway shall not be calculated as part of the minimum required area of the rear lot. Sec. V.B OSD - Open Space Development Zone - Sec. 11 - At least 25% of the total area of a development in the OSD zone shall be reserved for permanent open space, passive or active recreation, and/or other public purposes.

	Plan for Conservation and Development	Sec. 6.1.2 Undeveloped Land • The preservation of undeveloped land contributes to community character in Bristol. • Overall goal – encourage preservation of undeveloped lands within residentially zoned areas. • Action steps - establish an open space assessment program.
MIXED LAND USE	Zoning Regulations	Sec. II.B Definitions • <i>Mixed-Use Development (MUD)</i>: a building or buildings designed and developed on a single parcel of land in a unified manner and containing two or more residential, retail, office, recreational, cultural, institutional, or industrial uses. Sec. VI.D BT – Downtown/Neighborhood Transition Zone • BT - Downtown/Neighborhood Transition zone is an overlay zone of the R-10 and R-15 zones intended to accommodate a transition of uses (mixed) and residential densities between downtown Bristol and its adjacent residential neighborhoods. • Designates a maximum density in the mixed-use, mixed-density overlay zone (BT) and sets out requirements for exceptions via Special Permit.
INTERIOR/REAR LOTS	Zoning Regulations	Sec. II.B Definitions • <i>Interior Lot</i>: a lot which abuts only one street (See Appendix A, Figure A-5, “Types of Lots”). • <i>Rear Lot</i>: a lot located to the rear of another lot and served by an accessway owned in fee by the owner of the rear lot (See Appendix A, Figure A-5, “Types of Lots”). Sec. IV.A.13 General provisions for application of zoning regulations control rear lots • Rear lots are permitted in any Residential zone so long as the conditions outlined in this subsection are met (See Appendix A, Figure A-7).
	Subdivision Regulations	Sec. 5.02(8) - Design Standards, Lot Improvement and Access • Specifies the maximum number of rear lots allowed in any residential subdivision.
BOND REQUIREMENTS	Zoning Regulations	Sec. XI (A) - Site Plans • As a condition of Site Plan approval, the Zoning Commission may require that the applicant post with the City a performance bond to guarantee satisfactory completion of all proposed site improvements (excluding buildings) shown on the approved Site Plan.

	Subdivision Regulations	Sec. 3.01 Performance Guarantees • A performance guarantee may be posted by the subdivider with the Commission at any time prior to the completion of all approved subdivision improvements and utilities to guarantee the satisfactory completion of all street improvements, storm drainage, sanitary sewers, water supply and any other required improvements. • The performance guarantee shall be in an amount equal to 110 percent of the cost of the improvements required by the Commission. Sec. 3.02 Failure to Complete Improvements • If public improvements have not been installed within the terms of such guarantee, the Commission may, after 10 days written notice to the subdivider, call that portion of the performance guarantee necessary to complete such improvements for acceptance. Sec. 3.03 Partial Release of the Performance Guarantee • The City Engineer may recommend to the Commission partial release of performance guarantee if substantial portion of public improvements have been completed and the balance is sufficient to complete any remaining public improvements. In no case shall the performance guarantee be reduced below 15 percent of the original amount of the performance guarantee. Sec. 3.04 Release of the Performance Guarantee • The performance guarantee can be released only after certain conditions have been met. Sec. 2.04 Maintenance Guarantee • Subdivider must post a maintenance guarantee before release of performance guarantee, in an amount of \$5,000 or 15 percent of the value of the bondable improvements, whichever is greater, as required by the City Engineer. The maintenance guarantee shall remain in effect for a period of one year to guarantee that any damage to the accepted street and its appurtenances shall be repaired and that, at the end of the one year, such street shall be in the condition it was when the street was accepted. Sec. 12.1 Bond Requirements • Upon approval of the application and prior to issuance of a permit for a regulated use within an inland wetland or watercourse, the applicant may, at the discretion of the agency, be required to file a bond or other surety in a form approved by the agency. Sec. 11.01 Bond Requirements • An applicant for a permit for regulated activity or use within the Area may be required to file a bond as a condition of the permit.
	Inland Wetland and Watercourse Regulations	
	Aquifer Protection Area Regulations	

OPEN SPACE REQUIREMENTS	Code of Ordinances	Ch. 21 Art. IV – Open Space Lands • Sec. 21-182 – No plants, shrubs, trees and wildlife may be removed or destroyed on any open space land.
	Zoning Regulations	Sec. II.B Definitions • <i>Open Space:</i> A space not occupied by a building or structure on the same lot as the principal building or use. Sec. V(B) – OSD – Open Space Development Zone • Provides for OSD overlay zone to accommodate alternative forms of residential development that reduce required minimum lot sizes or provide for the clustering of dwelling units and provide for the preservation of land for open space, recreational and/or other public purposes, as well as protect natural and scenic features. • Must be placed in R-40, R-25, or R-15 zones, and should be at least 10 acres (R-40, R-25) or at least 6 acres (R-15). • At least 25% of the total area of a development in the OSD zone shall be reserved for permanent open space, passive or active recreation, and/or other public purposes. This land should be one continuous parcel and accessible by all residents if possible. • Proper provision, approved by the Commission, shall be made by the developer for the permanent reservation, operation, and maintenance of such land.
	Subdivision Regulations	Sec. 4.01 Standards for Maps and Plans – General Requirements • Proposed open spaces must be illustrated in concept plan, record subdivision map, and general subdivision map. Sec. 5.09 - Design Standards, Open Spaces, Parks and Playgrounds • The Commission may require that up to 15 percent of the total area of a subdivision be set aside for open spaces, parks or playgrounds. • Inclusion of Wetland Areas – the ratio of wetlands to non-wetlands of such land shall be no greater than the ratio of wetlands to non-wetlands of the entire tract. • Conservation Easements – Where the purposes of open space preservation can be achieved through permanent restrictions upon property, as distinct from fee ownership thereof, the Commission may approve the use of conservation easements. • Lists certain exemptions to open space requirement.

	Plan of Conservation and Development	Sec. 5: Preserve Open Space • Recognizes the preservation of open space as important to Bristol residents. • Overall Goal – Preserve open space for all Bristol residents. • Makes numerous recommendations on preserving open space - Maintain the open space land in Bristol – both in terms of the quantity and quality of open space land; promote public access to open space; acquire land for open space as it becomes available in locations recommended in the Plan, etc.
FEE IN LIEU OF OPEN SPACE	Subdivision Regulations	Sec. 5.09 (8) Fees in Lieu of Open Space • With the approval of the Commission, the subdivider may pay a fee to the City or pay a fee to the City and transfer land to the City in lieu of any requirement to provide open spaces, parks or playgrounds. • Such payment or combination of payment and the fair market value of land transferred shall be equal to not more than ten percent of the fair market value of the land to be subdivided prior to the approval of the subdivision. • A fraction of such payment will be placed in a fund established by the City to be used for the purpose of preserving open space or acquiring additional land for open space or for recreational or agricultural purposes.
	Plan of Conservation and Development	Sec. 5.3 Policies to Preserve Open Space • Where appropriate, utilize the "fee-in-lieu-of-open space" provisions of the Subdivision Regulations.
TRANSFER OF DEVELOPMENT RIGHTS		
PLANNED RESIDENTIAL DEVELOPMENT	Zoning Regulations	Sec. II.B Definitions • <i>Unified Residential Development (URD)</i>: a building or buildings designed and developed on a single parcel of land in a unified manner and containing single-family dwellings, two-family dwellings, three-family dwellings, multi-family dwellings, or any combination thereof.

CHESHIRE

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Zoning Regulations	Sec. 25.3.2 Approved Special Permits and Site Plans - Periodic inspections of the site shall be performed by an independent licensed professional engineer and written reports of such inspections shall be submitted to the Planning Department describing compliance with the engineer's report approved by the Planning and Zoning Commission as well as the status, maintenance, condition, integrity, and <i>adequacy of the sedimentation and erosion controls</i> approved by the Planning and Zoning Commission. Sec. 25.4 Application Requirements - The application [for an approved special permit and site plan] shall be accompanied by ... 10) Details of final grading and planting of the site <i>to prevent erosion</i> of the site both during the operation and at its conclusion. Sec. 25.5 Standards and Conditions - The filling, excavation, grading, or removal authorized by a permit under this section shall ... 4) not result in sharp declivities, pits or depressions, <i>soil erosion</i>, improper drainage or other conditions which would impair the reasonable reuse and development of the lot. Sec. 25.6 Restoration - Upon completion of work authorized, the area of excavated or otherwise disturbed ground shall be prepared or restored ... as follows. ... 3) A top layer of any arable soil, which shall be free of any large stones, shall be spread to a depth of not less than six (6) inches over the entire area, and the area shall then be seeded with a perennial grass and maintained until the ground shall be completely stabilized with a dense cover of grass <i>and there exists no danger from erosion</i>, but this provision shall not apply to the area of ponds, nor to exposed areas of ledge rock existing prior to excavation.

	Sec. 40.4 Planning and Zoning Commission Responsibilities • The Commission shall take into account, where appropriate . . . Water supply, sewage disposal facilities and drainage and <i>erosion control</i>. Sec. 42.3.13 Landscaping • The developer shall stabilize and landscape disturbed areas, <i>to prevent erosion</i> and shall plant around dwelling foundations as design indicates. Sec. 49 Soil Erosion and Sediment Control Regulations • 49.1 Purpose. To minimize soil erosion and sedimentation that occurs as a result of the construction of residential, industrial and commercial development. • 49.2 Activities Requiring a Certified Erosion and Sediment Control Plan: Any proposal for development that will cumulatively create more than one-half acre in area on land being developed must have a certified Erosion and Sediment Control Plan. • 49.3 Exemptions. The grading activities associated with the construction of a single family dwelling that is not part of a subdivision will not require a certified Erosion and Sediment control Plan. • 49.4 Erosion and Sediment Control Plan Submission Requirements - To be eligible for certification, a soil erosion and sediment control plan shall contain proper provisions to adequately control accelerated erosion and sedimentation and reduce the danger from storm water runoff on the proposed site based on the best available technology. Such principles, methods and practices necessary for certification are found in the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended. Alternative principles, methods and practices may be used with prior approval of the Commission. Said plan shall contain, but not be limited to: ▪ A Site Plan drawn to a scale of not smaller than 100 feet to the inch shall include: ○ Existing and proposed topography; ○ Disturbed areas, identifying the extent of all clearing and grading activities; ○ Proposed area alterations, including proposed structures, utilities, roads and property lines; ○ Location of and detailed information concerning erosion and sediment control measures and facilities, which shall include: a) soil types; b) wetlands; c) watercourses; d) water bodies; e) design details and/or specifications; f) schedule of application/installation; g)
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		application, installation and maintenance procedures; h) any storm water management facilities ○ Elements B.2 and B.3 of Section 4.2's narrative below. ▪ A narrative describing the: ○ Development project ○ Application, construction details and maintenance program during and after installation of a) soil erosion and sediment control measures and b) any storm water management facilities ○ Time schedule of: a) development indicating the anticipated start and completion of the project; b) the stages of creating and stabilizing disturbed areas; c) grading operations; d) other major construction activities ○ Design criteria including soil characteristics of the site relevant to erosion and hydrology; ○ Background data, methodology and calculations used to design structural measures or facilities ▪ Other information deemed necessary and appropriate by the Planning and Zoning Commission. • 49.5 Minimum Acceptable Standards - Overall planning for soil erosion and sediment control shall be performed using the principles as outlined in Chapters 3 and 4 of the Connecticut Guidelines for Erosion and Sediment Control, as amended. Planning shall result in a development that: minimizes erosion and sedimentation during construction; is stabilized and protected from erosion when completed; and does not cause off-site erosion and/or sedimentation. Planning shall consider off-site effects as well as on-site effects. - The minimum standards for individual measures are those in the Connecticut Guidelines for Erosion and Sediment Control, as amended. The Planning and Zoning Commission may grant exceptions when requested by the applicant if technically sound reasons are presented. - An appropriate method as set forth in the Connecticut Guidelines for Erosion and Sediment Control, as amended, shall be used in determining peak flow rates and volumes of runoff unless an alternative method is approved by the Commission. - Planned erosion and sediment control measures shall be installed as scheduled according to the plan.
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		- All control measures shall be maintained in effective condition to ensure the compliance of the certified plan. • 49.6 Issuance or Denial of Certification - The Planning and Zoning Commission shall either certify that the soil erosion and sediment control plan, as filed, complies with the requirements and objectives of this regulation; or certify with limitations or modification; or deny certification when the development proposal does not comply with these regulations or may cause hazards or damages adverse to the public safety and welfare. - The time limit for certification or denial of a soil Erosion and Sediment Control Plan shall be consistent with those stipulated in Chapters 124, and 126 of the General Statutes. The Soil Erosion and Sediment Control Plan will be reviewed simultaneously with the development proposal. - The Commission may forward a copy of the development proposal to the conservation and/or Inland Wetlands Commission or other review agency/consultant for review and comment. • 49.7 Conditions Relating To Soil Erosion and Sediment Control - The estimated costs of measures required to control soil erosion and sedimentation during and after development that are a condition of certification of any modified site plan shall be covered in a performance bond acceptable to the Planning and Zoning Commission. - Site development shall not begin unless the soil erosion and sediment control plan is certified and those control measures scheduled prior to site development are installed and functional. - The Commission may require the applicant submitting the erosion and sediment control plan to certify in writing upon installation of control measures or facilities, that such controls were installed according to the plan. • 49.8 Inspection. Municipal inspection during development shall ensure compliance with the certified plan and that control measures are properly performed, installed and maintained. • 49.9 Enforcement. Enforcement of this regulation shall be carried out as specified under General Statute Sections 8-3 and 8-12.
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	Subdivision Regulation	Sec. 1.27 Soil Erosion and Sediment Control Regulations • Definitions (same as Sec. 23 of Zoning Regs) Sec. 3.1.1 Application Requirements • A complete application shall include ... <i>Sedimentation and Erosion Control Plan and Specs.</i> Sec. 4.3 Topographic Maps • Maps shall show ... <i>Siltation and erosion controls.</i> Sec. 5.14 Trees • <i>To prevent erosion ... every effort shall be made toward the preservation of trees.</i> • The Planning and Zoning Commission may require deciduous and/or evergreen trees ... to be planted by the developer on subdivision lots ... where trees are deemed necessary for <i>erosion control</i> due to the creation of steep slopes and other topographical features. Sec. 7.9 Culverts • Culverts under street shall be extended at least to the edge of the right-of-way of the street. Headwalls, paving, flared-ends, and/or riprap, <i>adequate to prevent erosion</i>, shall be provided at the ends of all culverts. Sec. 14 Soil Erosion and Sediment Control Regulations • Adopts regulations set forth in sec. 49 of the Zoning Regs (same language)
	Inland Wetlands and Watercourses Regulations	Sec. 1 Findings and Purpose • The wetlands and watercourses are an interrelated web of nature essential to an adequate supply of surface and underground water; to hydrological stability and <i>control of flooding and erosion.</i> • It is, therefore, the purpose of these Regulations to protect the citizens of the State and particularly the Town of Cheshire by making provisions for the protection, preservation, maintenance, and use of the inland wetlands and watercourses by minimizing their disturbance and pollution; maintaining and improving water quality in accordance with the highest standards set by federal, state, or local authority; <i>preventing damage from erosion, turbidity, or siltation.</i> Sec. 2.1 Definitions • T. <i>Management practices</i> include ... erosion and sedimentation controls. • BB. <i>Pollution</i> means harmful thermal effect or the contamination or rendering unclean or impure of any waters of the Town by reason of materials discharged or deposited therein ... This includes, but is not limited to, <i>erosion and sedimentation resulting from any filling, land clearing, or excavation activity.</i>

	• DD. <i>Regulated activity</i> means any operation within or the use of a wetland or watercourse involving, but not limited to . . . any discharge which has potential for <i>significant erosion and/or deposition</i>. Sec. 4.1 As Of Right and Nonregulated Uses • The following operations and uses shall be permitted as nonregulated uses in wetlands and watercourses, provided they do not adversely disturb the natural and indigenous character of the wetlands or watercourses by removal or deposition of material, alteration or obstruction of water flow, or pollution of the wetlands or watercourses. . . . Conservation of soil, vegetation, water, fish, shellfish, and wildlife. Such operation or use may include, but is not limited to, <i>minor work to control erosion</i>. Sec. 7.1 Applications for a Permit to Conduct Regulated Activities • A complete application shall include . . . The purpose and description of the proposed activity and <i>the proposed erosion and sedimentation controls</i>, including other management practices and mitigation measures which may be considered by the Commission as a condition of issuing a permit for the proposed regulated activity. Sec. 7.2 Applications for a Permit to Conduct a Regulated Activity Which Involved a Significant Activity • If the proposed activity involves a significant activity . . . additional information, based on the nature and anticipated effects of the activity is required . . . Such additional information shall include . . . Engineering reports and analyses and additional drawings to fully describe the proposed project and any filling, excavation, drainage, or hydraulic modifications to watercourses and the <i>proposed erosion and sedimentation control plan</i>. Sec. 11.2 Action on Permit Applications • The permittee shall take such necessary steps consistent with the terms and conditions of the permit, to control storm water discharges and to <i>prevent erosion and sedimentation</i> and to otherwise prevent pollution of wetlands and watercourses. Cheshire Inland Wetlands & Watercourses Land Use Permit Fees • Other fees – Inspection of erosion control (silt fence, hay bales, etc.) is \$50.00 per lot.
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SLOPES	Zoning Regulations	Sec. 25.6 Earth Removal, Filling and Regrading - During restoration of land, slopes shall be evenly graded not exceeding one-foot vertical rise by three feet horizontal distance. Required slope may be modified by the Commission. Sec. 42.2 Qualifying Standards - Slopes in excess of 25% may be used as part of a calculation for up to 50% of a lot when determining maximum number of building lots (Same language is used in the various sections that outline the requirements for Design Standards [e.g. Sect. 43.3.1.1, 43.4.8, 44.3]). Sec. 43.4 Age Restricted Planned Residential Development Plan Submission - Preliminary development plan shall include a map showing slopes in excess of 25%. Sec. 5.3 - Steep slopes included as part of Unsuitable Land – structures shall not be built on land with average slope of 15% or greater unless detailed plans for construction, grading, storm and sanitary drainage, and existing and proposed contours are submitted and approved by the P&Z Commission. Sec. 5.14(2) - Commission may require planting of trees for erosion control in areas where steep slopes are created.
STORMWATER MANAGEMENT	Zoning Regulations	Sec. 43 Planned Residential Development, Sec. 44 – Planned Residential Subdivision Development - Sec. 43.4 and 44A.7.3 both note that control of stormwater is one criterion that shall be considered in the design standards for various types of development (for age restricted planned residential development and affordable housing development). Intent is to ensure planned measures are adequate to address runoff and existing structures will not be overburdened. - Sec. 43.4.1(e) – Total impervious surface area shall not exceed 25% for an age restricted planned residential development. - Sec. 44A.7.3 – Commission will consider stormwater drainage facilities when evaluating a special permit application for affordable housing. Sec. 45A Special Adaptive Reuse Development District - Sec. 45A.4 - There shall be zero increase in net storm water runoff from Special Adaptive Reuse development.

	Sec. 45B Interchange Special Development District • Sec. 45B.5.1(e) - Interchange Special Development Projects require a storm water management study that calculates existing and post-development drainage and discusses choices and rationale for the management of flows. • Sec. 45B.6(j) - Interchange Special Development District and Interchange Special Development project require that the plan show that storm water runoff will be controlled wherever retention or detention is possible and all necessary easements will be obtained by applicant. Sec. 49 Soil Erosion and Sediment Control Regulations • Stormwater runoff is mentioned as goal as part of E&S Plan. Sec. 80 Permit Requirements • Sec. 80-5.3(E)(4) - Permit Compliance – certified statement from professional engineer or other licensed professional who can conduct business with State of CT that stormwater management is in compliance with standards set forth in Sect. 80.7.4(C) of Zoning regulations. Appendix A – Design Standards • Drainage Facilities - Developer shall be responsible to construct drainage facilities for the control, collection, conveyance, and acceptable disposal of stormwater, other surface water and sub-surface water that might be detrimental to health, safety, and convenient use of any portion of the area – whether originating in the development area or in a tributary drainage area. Facilities shall be designed by registered professional engineer. Design will be dependent on site-specific conditions.
Subdivision Regulations	Sec. 5.4.1 • Where existing or proposed road grade will be materially higher than proposed lots fronting it the Commission may for reasons of excessive runoff, among others, require any lot or part of a lot to be regarded to be in harmony with the road grade. Sec. 7.3 Drainage Discharge • In general, in instances where concentration or accumulation or runoff from lot or subdivision could be in quantities or velocities that might present a nuisance to adjoining lots or other properties the flow will be diverted or controlled by measures such as a berm, swale, catch basin inlet – to alleviate the condition. The same shall be the case for sub-surface flows.

UPLAND REVIEW AREAS	Inland Wetland and Watercourse Regulations	Sec. 7.1 Application for Permit to Conduct Regulated Activities • Sec. F(14) – <i>Upland area</i> must be disclosed to properly assess the effect of an application on wetlands.
VERNAL POOLS	Inland Wetland and Watercourse Regulations	Sec. 2.1 Definitions • NN. Watercourses: rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, <i>vernal</i> or intermittent, public or private, which are contained within, flow through, or border upon the Town or any portion thereof not regulated pursuant to the <i>Connecticut General Statutes</i>, Section 22a-28 through 22a-35, inclusive. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: - Evidence of scour or deposits of recent alluvium of detritus; - The presence of standing or flowing water for a duration longer than a particular storm incident; and - The presence of hydrophytic vegetation. Sec. 80.7.4 • Environmental Standards for wireless communications state that locating facilities in wetland buffer areas shall be avoided to the extent possible, and disturbance to wetland buffer areas shall be minimized.
RIPARIAN BUFFERS	Zoning Regulations	Sec. 46 Floodplain Management • Intent of flood plain regulations are to protect human life and public health; minimize spending on flood on costly flood control projects; minimize need for rescue and relief with flooding; make sure purchasers of property are notified of special flood hazards and take responsibility for action; ensure continued eligibility of property owners for participation in National Flood Insurance Program. • Area of applicability applies to “Special Flood Hazard Areas” as designated by FEMA. • Any man-made change to improved or unimproved real estate may be made within “special flood hazard area” only in accordance with the requirements of flood plain regulations.

	- Standards are outlined including proper anchoring for structures (new and existing that is repaired); use of flood resistant materials and construction materials in new construction and substantial improvement projects; protection of utilities (electric, sewer) from flood waters; prohibition of new construction being located in Special Flood Hazard Area; use of construction methods to flood proof lowest floors and resist hydrostatic pressures; water holding capacity of the flood plain shall not be reduced (except in tidally influenced areas) and flood plain will be increased in event any reduction is created; encroachments on the flood plain are prohibited unless supporting documentation from professional engineers with supporting hydraulic/hydrologic assessment shows no increase in flood levels; any structures within flood zone must meet construction standards of the hazard area. - Floodways are defined as extremely hazardous area due to velocities and prohibitions are identified on construction within the floodways unless accompanied by certification from professional engineer. - Violations can be issued if a structure does not comply with floodplain management regulations. Structure must have required permits, lowest floor elevation documentation, flood-proofing certificates or required floodway encroachment calculations. - Standards for streams without established base elevations and/or floodways are outlined. No new construction or substantial improvements permitted that will raise base elevations more than one (1) foot; once floodway data is received the Town will adopt a regulatory floodway. - Describes the duties and responsibilities of the building official which include review of permits, ensure accuracy of flood data (elevations, etc.), inspection records, notification to adjacent towns regarding alteration of watercourses.
Subdivision Regulations	Sec. 4.8 100-year floodplain and floodplain elevation must be shown on site plans as part of requirement for as built plot plan. Sec. 5.2A - For special flood hazard area following requirements apply: subdivision shall be consistent with the need to minimize flood damage; public utilities in subdivision proposals shall be located/constructed to minimize flood damage; subdivision proposal shall have adequate drainage to decrease exposure to flood hazards; base flood elevation data are required for subdivision/development proposals greater than 5 acres or fifty lots (whichever is first).

		Sec. 5.3.1 All subdivision proposals will be reviewed to determine if they are safe from flooding. If any part of a proposed subdivision is located within the Flood Plain special hazard area as shown on Flood Insurance Rate maps (FIRM) (December 17, 2010) shall be reviewed to make sure that all safety measures are being met (See language from 5.2A).
WATERSHED- LEVEL APPROACH IN REGULATIONS		
PESTICIDE REDUCTION		
MUNICIPAL SEWER/WWTP FACILITIES		
ON-SITE SEPTIC SYSTEMS		

2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Zoning Regulations	Sec. 33.8.4 - Landscaping design standard states that existing native and non-native trees with significant aesthetic or scenic value should be preserved as long as the preservation does not impair the development of the site. Sec. 42.3.10.f - Under Use of Open Space Land, open space preserved as part of cluster subdivision shall be for conservation of forests (among other natural/environmental resources). Sec. 44A.10.11 Affordable Housing Design Standards - All mature trees should be retained on site to the greatest extent possible. Sec. 48 Interchange Zone - Forestry is permitted as of right activity in the Interchange Zone. - Should preserve and protect existing trees to greatest extent possible. Sec. 80.7.3 Wireless Communication - The Commission shall consider the potential impact on forests (among other natural/environmental considerations). Under Standards of Review is stated that existing trees shall be preserved to greatest extent possible.
	Subdivision Regulations	Sec. 5 Design Standards - Sec. 5.2 - All prominent features (e.g. water courses, water basins, wetlands, stone fences, ridge tops, scenic points, and similar irreplaceable natural assets shall be shown on the subdivision maps and preserved and conserved to the maximum. - Sec. 5.14 - Tree preservation is noted as a means to maintain ecological balance, protect from sun and wind, and for general health and welfare. As such maximum effort will be made to preserve trees. Regulation outlines density of planting for subdivision lots. No special regulations are established for tree preservation beyond basic needs of lots.

	Plan of Conservation and Development	- Cheshire wants to protect trees and shrubs to prevent erosion, help clean the air, provide windbreaks and offer cover and nesting sites for birds and animals. - The town and the Cheshire Land Trust is acquiring land for open space, wildlife, and “greenbelts” particularly along the ridge tops. - In 1984 the town embarked on a beautification effort which included planting trees lining main streets.
HISTORIC PRESERVATION		
CULTURAL LANDSCAPES		
INVASIVE SPECIES CONTROL	Zoning Regulations	Sec. 33.8.4 Landscaping design standard states that existing native and non-native trees with significant aesthetic or scenic value should be preserved as long as the preservation does not impair the development of the site.
	Inland Wetland and Watercourse Regulations	Sec. 10 Discusses considerations for decisions on an application. Although not an explicit requirement, removal of invasive plant species within wetland and upland areas is encouraged.

3. DRINKING WATER/AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION	Zoning Regulations	Sec. 20.5 General Provisions - Planning and Zoning Commission has opinion that sewerage should take place in Primary Aquifer Recharge areas wherever possible. Sec. 24.4 - Nonconformities identified as regulated activity in Aquifer Protection zone shall require all necessary permits as identified in the Aquifer Protection Regulations. Sec. 42.2 - Cluster subdivisions not in Primary Aquifer Recharge areas will only be approved with on-site sewage systems and public water supply. Sec. 44 - Requires in different subsections that aquifer protection be a consideration in development proposals. Sec. 80.7.4 - Wireless facilities shall conform to the Aquifer Protection regulations.
	Aquifer Protection Regulations	Sec. 3 - Delineation of Aquifer Protection Area Boundaries - Delineation shall consist of combined areas of contribution and recharge areas as shown on Level A maps approved or prepared by the Commissioner; Boundaries shall be delineated within 120 days after being notified by the by the Commissioner that an aquifer protection area is located partially or entirely within the Town of Cheshire. - In order to clarify the location of an aquifer protection zone, the Agency may apply to the Commissioner to extend boundary to coincide with nearest property line, municipal boundary, or topographic feature (pursuant to Sect.22a-354i-§ of Regulations of CT State Agencies). The extension shall, at minimum, fully encompass aquifer protection areas bounded by approved level A mapping but not exceed the distance necessary to clarify the location of the are or facilitate administration of regulations pertaining thereto.

		No person may challenge the boundaries of the aquifer protection area under the APA regulations unless the challenge is based solely on a failure the Agency to properly delineate the boundaries in accordance with Sect. 22a-354bn of CT Gen Statutes.
LOCAL AQUIFER PROTECTION AGENCY	Aquifer Protection Regulations	Sec. 1 Title and Authority - The Cheshire Planning and Zoning Commission is identified as the entity to act as the Aquifer Protection Agency shall delineate the aquifer protection areas on the Cheshire's Official Zoning Map. - The Agency shall administer all provisions of the act, approve or deny registrations, issue/deny permits.
AQUIFER PROTECTION REGULATIONS	Aquifer Protection Regulations	Sec. 1 Title and Authority - Aquifers are an essential natural resource and a major source of public drinking water for the State of Connecticut. Use of groundwater will increase as the population grows and opportunities for new surface water supplies diminish due to the rising cost of land and increasingly intense development. At the same time, numerous drinking water wells have been contaminated by certain land use activities, and others are now threatened. To address this problem, Connecticut has established the Aquifer Protection Area Program (Connecticut General Statutes §22a-354a to §22a-354bb) to identify critical water supply aquifers and to protect them from pollution by managing land use. Protection requires coordinated responsibilities shared by the state, municipalities, and water companies to ensure a plentiful supply of public drinking water for present and future generations. It is, therefore, the purpose of these regulations to protect aquifer protection areas within the Town of Cheshire. Sec. 4 Prohibited and Regulated Activities - Outlines the prohibited and regulated activities in aquifer protection areas. All regulated activities, as identified in Sec. 2, are prohibited. - Regulated activities not prohibited include registered regulated activity conducted in compliance with Sect. 22a-354i-9 of Regulations of CT State Agencies or Sect. 12 of the APA regulations; a regulated activity which has received a permit issued pursuant to Sect.22a-354i-8 of Regulations of CT State Agencies or Sect. 9 of APA regs. - Identifies unregulated activities. - If the Agency or its duly authorized agent finds that any person is conducting or maintaining any activity, facility, or condition which violates any provision of the regulations, the Agency or its duly authorized agent may issue a violation, written order, or suspend or revoke a permit.

		Sect. 12 Best Management Practices • Hazardous materials may be stored above ground within an aquifer protection area only in accordance with practices designated in Section 12.
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4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT / GREEN INFRASTRUCTURE	Zoning Regulations	Sec. 42 Cluster Subdivisions - Cluster subdivisions are permitted - This section outlines details (See alternative developments) - Growing challenge will be to reduce the impact on natural drainage systems as hard surface paving and roof surfaces have been increasing. - As part of Open Space goals, the town wishes to increase greenbelts through purchasing.
	Plan of Conservation and Development	
IMPERVIOUS COVER	Zoning Regulations	Sec. 40.7 Special Permits - All lot coverages for impervious surfaces to be shown on As-Built survey. Sec. 43 Planned Residential Development - Sec. 43.4.1(e) - Age Restricted - total impervious surfaces of development shall not exceed 25% if tract is serviced by individual on-site sewage disposal. - Sec. 43.4.8(i) - Design Standards for Age Restricted PRD – No more than 35% of the lot may be covered with impervious surfaces. - Sec. 43.4(e) - Defined as hard surface area which either prevents or retards the entry of water into the soil mantle at a rate lower than that present under natural conditions prior to development, and/or hard surface area which causes water to run off the surface in greater quantities and at an increased rate of flow from the flow present under natural conditions prior to development.
	Subdivision Regulations	Sec. 4.8 As-Built Plot Plan Lot coverage for all impervious surfaces shall be shown on as-built plot plan.
DESIGN REVIEW	Zoning Regulations	Sec. 41.7 Design standards are established for the various types of development and various elements of development. No specific regulations were identified for Design Review, however. Site plan shall be reviewed by Town Planner and any approval by Town Planner is subject to review by Planning and Zoning Commission.

ALTERNATIVE DEVELOPMENT DESIGNS	Subdivision Regulations	Sec. 5 Design Standards Design review will evaluate many different components including but not limited to suitability of land, natural features, flood plain management standards, unsuitable land, lots, parking, setback lines, top soil, pipelines, trees, and solar access.
	Zoning Regulations	Sec. 42 – Cluster Subdivisions - Intent of regulations is to provide opportunity for flexibility through cluster subdivision – permits reduction in minimum lot size normally required provided total number of lots is not greater than otherwise permitted for residential zone in which it is located. Cluster subdivision shall be considered a subdivision and is subject to subdivision and other land use regulations. Commission may require the applicant to adhere to conventional development requirements of Sect. 32, Schedule B and other applicable regulations if P&Z Commission determines proposed cluster subdivision does not provide significant benefits greater than would be achieved by conventional subdivision. - Sec. 42.2 - Qualifying standards are described. Minimum standards includes land having total gross area suitable for construction of minimum of 20 units in the zone in which the parcel is located; one open space parcel with minimum of 160,000 sq. ft.; proposals of R-20A, R-20, and R-40 shall be served by public water supply or state approved water supply and sanitary sewage disposal system. R-80 zone not in Primary Aquifer Recharge area shall have only approved on-site sanitary sewage system and public water supply; land not allocated to building lots or streets shall be permanently reserved as open space, which Commission may require to be transferred to an association of homeowners. - Sec. 42.3.10 - Use of open space land is reserved for the following: parks, playgrounds, other outdoor recreation areas; protection of natural streams, ponds or water supply; conservation of soils, wetlands, marshes; protection of natural drainage systems or protection from flooding; preservation of sites/areas of scenic beauty or historic interest; conservation of forests, wildlife, agricultural and other natural resources; recreation buildings, pools, tennis courts, bus shelters or other facilities or structures as may be approved by Commission. - Sec. 42.3.12 - Cluster subdivision can be developed in sections or phases.
	Subdivision Regulations	Section 13 – Cluster Subdivision - Outlines the regulations governing cluster subdivisions and/or planned residential developments. All cluster subdivisions will abide by regulations set forth in Section 42 of zoning regulations. - In cases where the cluster development will be phased and constructed in sections, each section shall be considered an individual development and shall be required to meet the requirements established in the Zoning regulations.

DENSITY BONUS	Zoning Regulations	Sec. 44.5 – Planned Residential Development - Density Bonus shall be equal to a maximum of 20% of the “base number of lots” as determined above. Nothing shall be construed to require the Commission to permit or approve an “affordable density bonus” if less than 20% of the total number of units to be developed are to be “affordable units.” - Density bonus is a maximum of 20% of the total lots approved or 19.2 (rounded up to 20).
MINIMUM BUILDABLE AREA	Zoning Regulations	Sec. 45.2 – Special Development District - In the Special Development District special design applications will be considered only when the project is at least 1 and one-half acres or is contiguous to or coordinated with Special Development project. Sec. 45A - Special Adaptive Reuse District - Sec. 45A.2.a - Special Adaptive Reuse District has as a minimum criterion that the tract shall consist of a single lot or number of contiguous lots having a total area of not less than three (3) acres. - Sec. 45A.8 - Amendments to Special Adaptive Reuse District may be made by the Commission and such amendments need not meet the three (3) acre minimum (as required by Sect. 45A.2). Sec. 45B – Interchange Special Development - Sec. 45B.2 - Interchange Special Development Project applications considered only when proposed project is at least 30 acres, and served by public water and sewer. - Sec. 45B.8 - Amendments to Interchange Special Development District may be made by Commission and need not need meet thirty (30) acre minimum requirements set forth in Sect. 45B.2. Sec. 30, Schedule A - Minimum area required for campground is 50 acres (20); for horses ponies and other equine animals 2 acre minimum (24A);Livestock, cattle and other farm animals 3 acre minimum (24B); Chickens minimum of 80,000 sq. ft (24c); Stables and riding academies, horses/ponies for hire minimum of 15 acres (24D); Kennels/boarding facilities, veterinary hospitals in residential zones require minimum of 5 acres (25); carnivals and fairs minimum of 3 acres (31); gasoline stations/auto repair facilities minimum of 30,000 sq. ft. (42); motor vehicle dealers minimum of 40,000 sq. ft. (43).
	Subdivision Regulations	Sec. 5.3 Unsuitable Land Regulation outlines the minimum suitable land area required in unsewered districts (excluding swamp, water, or ledge rock – R-20 = 20,000; R-40 = 32,000; R-80 = 32,000.

UNBUILDABLE LAND	Zoning Regulations	Sec. 44A.10.1 Building may not exceed 2 units per net buildable acre in an R-80 district; three (3) units per net buildable in an R-40 (44A-16)44A.10.1 cont'd district; and four (4) units per net buildable acre in an R-20, R-20A, C-1, C-2, and C-3 district. Net buildable acreage is defined here as gross acreage excluding all ponds or other substantial bodies of water and excluding fifty percent (50%) of any acreage designated as inland wetlands, or flood plain areas. If the applicant proposes a density greater than the maximum density specified, the applicant shall submit to the Commission an economic analysis detailing why the project requires the higher density.
	Subdivision Regulations	Sec 5.3 Unsuitable Land Unsuitable land is defined as bodies of water, ledge rock, swamps, and steep slopes. No structures to be built on slopes 15% or greater unless shown on plans and approved by P&Z Commission; no structure to be built within 50 feet of nearest high water line or a river, stream, lake, pond, brook or swamp as measured at spring time height or on the visible bank – whichever is closer; lots shall be reviewed to determine flood potential.
MIXED LAND USE	Zoning Regulations	Sec. 23 – Definitions <i>Mixed land use:</i> a development that is planned and managed as a single property with off-street parking, landscaped areas, and pedestrian plazas provided on the property as an integral part of the development, and which has two or more different uses such as but not limited to, office, retail, food service establishments, service businesses, banks, public and entertainment and, in limited and appropriate circumstances, residential, in a compact form. Sec. 45B – Interchange Special Development District - Allow for mixed used development in order to promote/allow for flexibility in use and design.
	Subdivision Regulations	Sec. 12 Non-Residential Subdivision Outlines the requirements for non-residential land uses. The regulations do not make any mention of mixed land use as a consideration or possibility, and there is no explicit prohibition or statement that it is permissible.
INTERIOR/REAR LOTS	Zoning Regulations	Sec. 30, Schedule A Permitted Uses - Dwellings containing one (1) dwelling unit and not more than two (2) such dwellings per rear lot (as regulated by Section 5.5 of the Subdivision Regulations) providing all requirements of the regulations shall be met for each dwelling unit as though each were on an individual rear lot.

	Subdivision Regulations	Sec. 5.5 Rear Lots - Rear lots may be permitted by the Planning and Zoning Commission subject to obtaining a special permit from the Planning and Zoning Commission as provided in Section 40. Approval shall not be granted unless said commission finds that the land characteristics and physical site conditions make the creation of rear lots practical and desirable, and only if the Commission determines that there is no logical or feasible alternative for the lots to be properly served by an accepted Town road, street or highway at the present time or in the foreseeable future. Guidelines regarding rear lots include that should be avoided where possible, number of rear lots shall be kept to a minimum, permitted only in residential zones. - Requirements for rear lot accessways are described in 5.5B.1 – 5.5B.16. Some of the requirements include the following: no more than three rear lots served by single accessway, no driveway from rear lot accessway will exceed 350' or have grade in excess of 10%, if topographical conditions warrant installation of drainage pipes, catch basins and/or curbing the Commission shall require it, a maintenance agreement approved by P&Z shall be signed by property owners, no lot served by accessway shall be further subdivided, rear lot accessways shall not exceed 1700' linear feet for have grade in excess of 10%. (Regulations have Maintenance Agreement boilerplate as an appendix). - For accessways less than 600' – road will be minimum of 15' wide and paved with clear zone of 6' wide on each side. End of accessway will have paved turnaround with minimum radius of 25'. - For accessways between 600' and 999' road will be minimum of 15' wide and paved with clear zone of 6' wide on each side. End of accessway will have paved turnaround with minimum radius of 25'. - For accessways from 1000' to 1700' each lot served will have 3 times the minimum lot area required by the Zoning regs for the zoning district in which the subdivision is located; accessway width is to be 24' and will have cul-de-sac at end, which must conform with Town standards for cul-de-sacs.
BOND REQUIREMENTS	Zoning Regulations	Sec. 23 Definitions - Under street definitions for proposed public and approved private regs not that such streets may need to be bonded to ensure completion. Sec. 25 Earth Removal, Filling, and Regrading - Sec. 25.3.2 - Under approved special permits and site plans it is noted that in addition to any bonds required for E&S controls, applicant shall post a bond or other approved form of surety in an amount determined by P&Z to ensure that earth removal, filling, grading, and excavation are completed in accordance with the plans. - Sec. 25.8.3 - Before any permit is granted under this section applicant is required to file with the Commission a cash or surety bond, or savings account in form and amount acceptable to Commission.

	Sec. 32.10 – Restoration of Public Improvements requires bonding. Sec. 42 – Cluster Subdivision • Recreation facilities under Cluster Subdivision shall be completed or bonded for completion prior to issuance of any zoning permits for Cluster Subdivision. All structures and improvements shall be completed or bonded for completion before issuance of zoning permits for cluster subdivisions. Other • Bonds are required for planned residential development; special development districts; special development projects; erosion and sedimentation control; and facilities that are part of wireless communications project.
Subdivision Regulations	Sec. 5.6 Cul-de-Sac Street or Dead End Street • Bonds are mentioned as required for items such as construction of temporary dead end or cul-de-sac streets, traffic control devices, and street name signs. Sec. 9.1.2 – Community water systems shall be bonded, the amount to be determined by the Town Engineer. Sec. 10 Guarantee of Performance • Bond with surety is identified as one of three methods for Guarantee of Performance. • Sec. 10.6 - Whatever type of bond is filed with the Town it shall secure the actual construction and installation of improvements and utilities and/or costs of winter maintenance within one year from date of approval of the subdivision plan. • Sec. 10.10 - Failure to complete improvements allows the Commission to declare the developer to be in default and to withdraw the total amount of the surety. If the amount in surety is insufficient to cover costs, the developer/owner will remain liable for excess amount. • Sec. 10.13 - The applicant shall be required to file a Maintenance Bond with the Town prior to dedication of public improvements in order to assure the satisfactory condition of the completed improvements until April 30 of the following year, or such later date as shall be necessary to correct any defects that may have developed after the winter season. • Sec. 10.14 - The Maintenance Bond shall be in an amount not less than 10% of the costs of improvements • Sec. 10.19 - Clean-up is required every 90-day – construction debris removal, proper removal of other materials (e.g. tree stump, etc.) Failure to comply constitutes right of Town to take action under the Performance Bond.

OPEN SPACE REQUIREMENTS	Zoning Regulations	Sec. 42 Cluster Subdivisions • Sec. 42.2.1 - Cluster subdivisions requires inclusion of open space – “at least one contiguous parcel of open space as provided for in Section 42.2.4 with a minimum of 160,000 sq. ft.”, and continues to say that open space area should be commensurate with size of cluster subdivision. • Sec. 42.2.4 - Land not allocated to building lots and streets in Cluster subdivision shall be permanently reserved as open space. Commission may require open space to be transferred to homeowners’ association, in which case each homeowner shall own an undivided interest in the open space proportionate to the total number of lots in the subdivision and shall be liable for all necessary maintenance costs of the open space. - In specific cases the Commission may require the open space be conveyed to the Town or to a trust or other acceptable entity. • Sec. 42.3.10 - Use Of Open Space Land for Cluster Subdivisions includes parks, playgrounds, outdoor recreation and facilities; protection of natural streams, ponds, water supply; conservation of soils, wetlands or marshes; protection of natural drainage systems or assurances of safety from flooding; preservation of sites/areas of scenic beauty or historic interest; conservation of forests wildlife, agriculture or other natural resources; recreation buildings, pools, tennis courts, bus shelters and other common use structures approved by the Commission. • Sec. 42.6 - Part of approval criteria states that open space and proposed use of open space is significant and beneficial. Benefits gained from cluster development will benefit the residents of the development or the Town to an extent that it warrants the cluster rather than conventional development. Sec. 43 - Planned Residential Development • Planned residential development is in part intended to “provide for more efficient allocation and maintenance of common usable open space for recreation and/or conservation.” • Sec. 43.4 - Age restricted Planned Residential Development – A further purpose is to promote benefit to the general community by encouraging ‘the preservation . . . of lands necessary for the recreational and open space needs of the town. - Sec. 43.4.3 – Maps shall show location(s) amount of proposed designated open space. - Sec. 43.4.8(k) - All land not utilized for dwellings and private usable outdoor space shall be considered common land. In an R-80 zone, the minimum amount of land to be set aside as open space shall be not less than 50% of the net property area. In an R-40, R-20 or R-20A zone, the minimum amount of land to be set aside as open space shall be not less than 40% of the net property area.
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		• Sec. 43.5.7(g) - Not less than 1,000 square feet of permanent usable open space per dwelling unit shall be provided for outdoor activities. Not less than 60 square feet of private outdoor space immediately adjacent to each dwelling unit shall be provided. Required paved vehicular areas, wetlands, and private outdoor space shall not be considered permanent usable open space. Sec. 44 – Planned Residential Subdivision • Open space regulations are outlined in section. Intent is to provide for more efficient allocation and maintenance of common usable open space for recreation and/or conservation and to provide for affordable housing within the Town of Cheshire.
	Subdivision Regulations	Sec. 2.3 – Commission may provide for open spaces for parks and playgrounds. Sec. 4.2 Record Subdivision Maps • Total calculated area of the any designated open space shall be included on the plan and physical area of any portion of subdivision to be set aside as open space shall be shown on the plan, and clearly designated. Sec. 5.10.1 - All areas to be left in natural condition, including open space, shall be delineated and shown on map and are subject to approval of the Commission. Sec. 10 - Performance Guaranty • Open space transfers shall be guaranteed through conditional approval, guarantee with surety bond, or approval without bond.
FEES IN LIEU OF OPEN SPACE	Zoning Regulations	Sec. 43 – Planned Residential Development • Sec. 43.4.8(k) – A fee in lieu of some or all of the required Open Space may be approved by the Commission. The fee with be determined by the assessed value of the property.
TRANSFER OF DEVELOPMENT RIGHTS		
PLANNED RESIDENTIAL DEVELOPMENT	Zoning Regulations	Sec. 43 – Planned Residential Development • To be considered for Planned Residential Development the tract must consist of a single lot or a number of contiguous lots under one ownership not less than 10 acres. • The tract must be within one or more zones in Section 30, Schedule A or must meet 50' minimum frontage requirements of Section 43.1.3. • Commission will review Site plan and issue a Special Permit if applicable. Upon completion of work to the satisfaction of the Commission any bond shall be released.

	Subdivision Regulations	Sec. 13 – Planned Residential Development • All Planned Residential developments shall comply with section 43 and all other sections of the Zoning regulations. • In cases where the developer chooses to develop in phases or sections each phase/section shall be required to meet the Zoning regulations as if it were an individual subdivision/development project.
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EAST HAVEN

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Zoning Regulations	Sec. 33.11.9 Sediment and Erosion Control Plan - A Sediment and Erosion Control Plan shall be required for all Special Exception and Site Development Plan approvals where the cumulative area[s] of disturbance is more than one-half 1/2 acre, and if otherwise deemed necessary by the Commission. Sec. 47 Sedimentation and Erosion Control - A soil erosion and sediment control plan shall be submitted with any application for development where the cumulative area[s] of proposed disturbance is more than 10,000 square feet, or otherwise is deemed necessary by the Commission and/or its technical staff. - Single or two-family dwellings not part of a subdivision is exempt.
	Subdivision Regulations	Sec. 2.3.8a Types of Bonding Required - Requires separate bond set by Town Engineer for Sedimentation and Erosion Control. - Calculated to insure the developer establishes and maintains adequate Sedimentation and Erosion Control measures during development. Sec. 6.5 Grading Plan - In addition to the Grading Plan, the Commission or the Town Engineer may request the submission of a complete sedimentation and erosion control plan for the proposed subdivision.
SLOPES	Zoning Regulations	Sec. 4.26 Lot, Area and Shape - Each lot shall contain an area of contiguous buildable land, exclusive of steep slope areas defined as any areas having a horizontal width of 30 feet or more with a grade of more than 25%. - Access to the buildable area must be accomplished without traversing a steep slope area. Sec. 31 Topsoil, Sand, and Gravel - Projects should prevent creation or exacerbation of safety hazards such as cliffs and unstable slopes.

		- Requirements for finished earth slopes to be certain height and soil stability. Finish rock slopes are allowed if certain conditions are met. - Also includes slope requirements for during construction and site restoration, including evenly grading the area to promote adequate drainage.
	Subdivision Regulations	Sec. 7.15 Open Spaces for Parks and Playgrounds Steep slopes can constitute no more than 10 percent of calculated open space.
STORMWATER MANAGEMENT	Zoning Regulations	Sec. 48 Stormwater Management - Recognizes that increased development without proper control can be significant source of water pollution, and intends to protect and preserve water from nonpoint sources of pollution through proper stormwater management. - Any applicant seeking approval on site plan, subdivision, special exception, coastal site plan review, or inland/wetland permits must include a Stormwater Management Plan in the application if the project (at least one of the following): disturbs 5+ acres of total land area; pertains to any site having 1+ acres of impervious cover; pertains to any new industrial or commercial project; or is otherwise required by the Commission. - Commission can waive SMP requirement if it determines that the proposal will not have the potential to cause significant nonpoint source pollution. - Zoning Enforcement Officer and Town Engineer can enforce these provisions. Violating parties can be penalized with a monetary fine and can be required to immediate halt operations until the violation is abated.
UPLAND REVIEW AREAS		
VERNAL POOLS		
RIPARIAN BUFFERS		
FLOODPLAIN MANAGEMENT	Town Ordinances	Ch. 9 Flood Damage Prevention and Control - Establishes Flood and Erosion Control Board. - Recognizes flood hazard areas and voluntary participation in the NFIP, and states that purpose of chapter is to regulate floodplain development.

		- Prescribes permitted and prohibited uses within special flood hazard areas of East Haven, based upon FEMA's Flood Insurance Rate Maps. - Note: FEMA presented East Haven with revised maps associated with Quinnipiac River Watershed Restudy Project. These became effective on May 16, 2017. - Floodplain development permit is required before commencement of any development activities within any special flood hazard areas. - Specific requirements for construction projects and subdivision proposals.
	Zoning Regulations	Sec. 23.23 Flood Plain District Districts designed to delineate flood prone areas of special flood hazard, with specific restrictions on construction and land use to avoid flood danger.
WATERSHED-LEVEL APPROACH IN REGULATIONS		
PESTICIDE REDUCTION		
MUNICIPAL SEWER/WWTP FACILITIES	Town Ordinances	Appendix B – Sanitary Sewer System Sec. 15 - If the Administrator permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the Town Engineer, and subject to the requirements of all applicable codes, ordinances and laws.
ON-SITE SEPTIC SYSTEMS	Town Ordinances	Appendix B – Sanitary Sewer System Sec. 3 - It shall be unlawful for any person to construct or repair any privy, privy vault, septic tank, cesspool or other facility intended for the disposal of sludge if public sewers are available.

2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Zoning Regulations	Sec. 33.12.4 Landscaping and Screening - Existing large and/or specimen trees shall be preserved to the maximum extent possible, particularly within front landscape and buffer areas. - No trees in front landscaped areas shall be removed without approval, and shall be replaced in kind with one or more trees.
HISTORIC PRESERVATION	Town Ordinances	Sec. 9-41 Definitions of Flood Damage Prevention Regulations Defines historic structure as any structure listed on federal, state, or local historic registries.
CULTURAL LANDSCAPES		
INVASIVE SPECIES CONTROL	Zoning Ordinance	Sec. 30.8.2.5 Landscaping Plan for TP/ED Districts Plant material selection shall give preference to native, non-invasive plant species.

3. DRINKING WATER/AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION		
LOCAL AQUIFER PROTECTION AGENCY		
AQUIFER PROTECTION REGULATIONS	Zoning Regulations	Sec. 48 Stormwater Management Defines <i>aquifer</i> as a geologic formation that contains sufficient saturate, permeable materials to yield significant quantities of water to wells and springs.

4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT /GREEN INFRASTRUCTURE	Zoning Regulations	Sec. 1.4 Purpose and Intent - Intend to facilitate low impact development and encourage energy efficient patterns of development and land use, the use of solar and other renewable energy sources and energy conservation in order to minimize dependence upon non-renewable, imported fossil-based fuels. Sec. 48 Stormwater Management - Defines <i>low-impact development</i> (LID) – A site design strategy intended to maintain or replicate predevelopment hydrology through the use of small-scale controls integrated throughout the site to manage runoff as close to its source as possible, guided by the 2004 Connecticut Stormwater Quality Manual. - All developments shall pursue LID standards and techniques as much as possible. Sec. 30 TP/ED Districts - Maximum lot coverage shall not exceed 65%, including all buildings, pavement, and impervious surfaces. Sec. 48 Stormwater Management - Defines <i>impervious surface</i> as material or structure on, above or below the ground that does not allow precipitation or surface water to penetrate directly into the soil. - Any project pertaining to site having 1 or more acres of impervious surface requires stormwater management plan.
IMPERVIOUS COVER	Zoning Regulations	Sec. 33 Site Plans and Special Exceptions - Commission must hold public hearing for special exception applications, and may hold public hearings for site plans. - Commission reviews special exception and site plan applications, and shall take into account issues of public health, safety, and general welfare, and may provide conditions and safeguards as necessary.
DESIGN REVIEW	Zoning Regulations	Sec. 1.3 Subdivision Approval No subdivision or resubdivision shall be considered approved until Commission has endorsed its approval on the record subdivision map.

		Sec. 1.4 Construction Approval - All construction and installation of streets, drainage and other improvements shall be carried out under supervision of Town Engineer/Director of Public Services who shall report to Commission and/or Town Council. Sec. 2 Procedures - Recommends submission for informal preliminary consideration by Commission, including preliminary sketch plan. - Application, Site Development Plan, Record Subdivision Map, and relevant Plans and Reports must be presented to Commission at meeting. - Commission determines whether documents conform to regulations, and may request such additional information as it sees necessary. - Public hearing may be held if the Commission thinks the circumstances justify such an action.
ALTERNATIVE DEVELOPMENT DESIGNS	Zoning Regulations	Sec. 35 Open Space Development Plans Commission may grant a special exception to permit establishment of OSDP, for the purpose of authorizing development in clusters and in such a manner as to preserve open space and conservation areas.
DENSITY BONUS		
MINIMUM BUILDABLE AREA	Zoning Regulations	Sec. 28 Planned Elderly Assisted Living District Calculates minimum lot area based on number of dwelling units.
UNBUILDABLE LAND		
MIXED LAND USE		
INTERIOR/REAR LOTS		
BOND REQUIREMENTS	Zoning Regulations	Sec. 27 Planned Elderly Facilities District, Sec. 28 Planned Elderly Assisted Living District - Applicant must file performance bond to guarantee faithful performance of all required site improvement work. - Preliminary approval is contingent on posting of performance bond. Sec. 30 TP/ED Districts - Must file completion bond prior to any preliminary site work or issuance of zoning permit. Bond should be sufficient amount so as to guarantee restoration of the site. Sec. 31 Temporary Special Exceptions, Sec. 33 Site Plans and Special Exceptions - Applicant must file bond to guarantee faithful performance of work in accordance with these sections.

	Subdivision Regulations	Sec. 2.3.8a Types of Bonding Required • Performance bond required that will insure completion of subdivision as approved. • Separate bond required to ensure adequate sedimentation and erosion control measures. • Maintenance bond and post-approval maintenance bonds are also required. Sec. 2.3.11 Release of Bonds • No bond can be released until inspection and certification of compliance.
OPEN SPACE REQUIREMENTS	Zoning Regulations	Sec. 35 Open Space Development Plans • Plan shall result in preservation of significant and desirable land for open space and conservation purposes with suitable access, shape, dimension, character, etc. • Minimum area of open space land shall not be less than the following area per number of dwellings (in square feet): R-3 = 7,500; R-4 = 10,000; R-5 = 15,000. • Minimum required open space shall be permanently reserved, and provisions shall be made for retention and preservation of the land accordingly. Sec. 7.15 Open Spaces for Parks and Playgrounds • In all subdivisions proposed for residential development, there is minimum standard guideline that 10% of total subdivision area should be open space. • Minimum area shall be one acre unless otherwise approved by Commission. • Areas of wetlands, steep slopes or depressions, and/or large rock outcroppings shall constitute no more than 10% of the area of calculated open space.
FEES IN LIEU OF OPEN SPACE	Subdivision Regulations	Sec. 7.16 Payment in Lieu of Open Space Land • Developer may propose to substitute a fee of 10% of the fair market value of the area of land to be subdivided to be paid to the Town in lieu of the creation and dedication of open space.
TRANSFER OF DEVELOPMENT RIGHTS		

PLANNED RESIDENTIAL DEVELOPMENT	Zoning Regulations	Sec. 26 Planned Development Districts - Allows tracts of land to be developed as harmonious design units of stable character within the Shoreline Development Area, as delineated on the Zoning Map. - Allowed when proposed tracts are of sufficient size to accommodate units and when another zoning district could not be appropriately established to accomplish the proposal. - Petition for establishment of PDD must be submitted to Commission accompanied by statement, development plan, and procedure and findings from meetings between petitioner and Commission. Sec. 28 Planned Elderly Assisted Living District - Allows development of facilities on tracts of land larger than 10 acres, providing limited medical and/or daily supplemental care to elderly tenants in a semi-independent residential campus setting. - Applicant must follow procedures for a zone change before following procedure for approval of special exception and site plan approval for facility. - Prescribes number of requirements for these facilities, including lot coverage, number of dwellings, and mandatory supporting facilities.
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MERIDEN

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Zoning Regulations	Sec. 213-50A(2)(d) – Extraction and Excavation Regulation - A soil erosion and sedimentation control plan must adequately control accelerated erosion and sedimentation and reduce the danger from stormwater runoff. Sec. 213-57 – Soil Erosion and Sediment Control - Purpose: to minimize soil erosion and sedimentation that occurs as a result of the construction of residential, industrial and commercial development. - A soil erosion and sediment control plan shall be submitted with any application for development when the disturbed area of such development is cumulatively more than 1/2 acre. - No development, grading of the land or stripping of vegetation shall be permitted on slopes of 20% or steeper without an erosion and sediment control plan, including any land that may be further divided or density increased. - Exemptions: (1) A single-family dwelling that is not part of a subdivision of land; (2) Any application for development for which the disturbed area is 1/2 acre or less (The Commission or its agent may require temporary and permanent soil erosion and sediment control measures for development plans disturbing less than 1/2 acre.); (3) Agricultural uses such as crop and tree farming and greenhouses or nursery operations. - To be eligible for certification, a soil erosion and sediment control plan shall contain proper provisions to adequately control accelerated erosion and sedimentation and to reduce the danger from stormwater runoff on the proposed site based on the best available technology. - Prior to certification, any plan submitted to the municipality may be reviewed by the County Soil and Water Conservation District, which may make recommendations concerning such plan, provided that such review shall be completed within 30 days of the receipt of such plan.

	• The estimated cost of measures required to control soil erosion and sedimentation, as specified in the approved or certified plan, may be covered in a performance bond or other assurance acceptable to the Commission. • Site development shall not begin, nor shall a building permit be issued, until the soil erosion and sediment control plan is approved, the control measures and facilities in the plan are bonded, and those measures scheduled for installation prior to site development are installed and functional. • Inspection shall be made by the Commission during development to ensure compliance. The Commission may require the permittee to verify compliance through progress reports. • If the Commission or its agent determines that the requirements of the approved soil erosion and sediment control plan are not being adhered to, a cease and desist order shall be issued and will remain in effect until the violation is corrected.
Subdivision Regulations	Sec. 2 - Definitions • 2.20 - Soil Erosion and Sediment Control Certification: A signed written approval by the Planning Commission that a soil erosion and sediment control plan complies with the applicable requirements of these regulations. • 2.21 - Soil Erosion and Sediment Control Plan: A scheme that minimizes soil erosion and sedimentation resulting from development and includes, but is not limited to, a map and a narrative. Sec. 3.55 – Soil Erosion and Sediment Controls • The soil erosion and sediment control plans shall result in a development that: minimizes erosion and sedimentation during construction; is stabilized and protected from erosion when complete; and does not cause off-site erosion and/or sedimentation. • A soil erosion and sediment control plan shall be submitted with any application for subdivision development when the disturbed area within the entire subdivision is cumulatively greater than one-half acre. The Commission may require temporary or permanent soil erosion and sediment control measures for development plans disturbing less than one-half acres. • To be eligible for certification, a soil erosion and sediment control plan shall contain proper provisions to adequately control accelerated erosion and sedimentation and reduce the danger from storm water runoff on the proposed site based on the best available technology. • See Section 213-57 of Zoning Regulations for what the Plan must contain, its minimum standards, and conditions and inspection requirements.

		- The Planning Commission or its designated agent may grant conditional certification for the soil erosion and sediment control plan prior to approval of the overall site development plans for a subdivision, provided that all requirements of this section have been met. 4.31 - Subdivision Plan Data - A Soil Erosion and Sediment Control Plan is required with an application for subdivision plan approval. Sec. 213-50 – Extraction and Excavation Regulations - Sec. 213-50B(1) - Slopes created by fill shall not be steeper than one foot of vertical rise in two feet of horizontal distance unless stabilized by a retaining wall or cribbing, except where approved by the City Engineer. Sec. 213-57B – Soil Erosion and Sediment Control - No grading of the land or stripping of vegetation, or development is permitted on a slope of 20% or steeper.
SLOPES	Zoning Regulations	Sec. 3.66 Public Open Spaces - Steep slopes offered to meet the open space requirement shall be no greater than the ratio of land with such features to land without such features of the entire tract. Steep slopes are defined as slopes greater than 18 %. - Conservation Easements are suitable for sensitive areas such as steep slopes. Sec. II Community Character - Steep slopes, ridgelines, small hills and valleys punctuate Meriden’s rolling terrain. - Strategy: Support actions that protect areas containing slopes that exceed 15%. Section IX.C Natural Resources: Soils - Identifying areas of steep slopes is an important component to the natural resource inventory. The areas identified as steep slope soils are illustrated on the map titled Environmentally Sensitive Soils. - Action: Develop regulations that protect areas containing slopes that exceed 15% (to be completed by Planning Commission and City Council in the Short Term (1-3years)). Sec. 213-46A - In order to minimize erosion and stormwater runoff, all portions of improved multifamily and nonresidential properties not being used by a structure, off-street parking, walkways, or the like, shall be landscaped with grass, shrubs, trees, and other ground cover.
	Subdivision Regulations	
	Plan of Conservation and Development	
STORMWATER MANAGEMENT	Zoning Regulations	

	Subdivision Regulations	Title V: Development Stormwater Management Standards • A stormwater management plan shall be submitted to the City of Meriden as a part of any development project that will disturb one or more acres of total land area on a site. The Planning Commission will be the lead agency in reviewing said plan, except that the Inland Wetland Watercourse Commission can also review said plan where they have jurisdiction. • Applicants should be made aware that any development which calls for a total disturbance of over 5 acres also requires the submission of registration to the Connecticut DEP under the General Permit. • Stormwater management plans should be strongly encouraged for all land use and development projects, even where they are not required, and protective principles and techniques should be employed even for small projects. Whenever applicable, Low Impact Development Management Practices should be applied. • Specifies contents of SWMP, and standards and criteria for plan approval. • Also includes low impact development stormwater practices.
UPLAND REVIEW AREAS		
VERNAL POOLS		
RIPARIAN BUFFERS	Subdivision Regulations	Title V, Sec. 4 – Stormwater Management Plan, Standards and Criteria for Decision • Riparian buffers should be preserved during construction.
	Plan of Conservation and Development	Section IX.E Natural Resources: Significant Habitats and State Listed Species • Defines riparian buffers and highlights their benefits. • In Meriden, a 100-foot buffer was recommended along watercourses where riparian corridor efforts should be considered. These areas are illustrated on the map titled Significant Habitats and State Listed Species. • Riparian Corridor Focus Areas: The protection of land directly adjacent to the City's watercourses, including wetlands and floodplains, is an important focus of the City's future open space plan.

FLOODPLAIN MANAGEMENT	Town Ordinances	Ch. 110 Floodplain Management • The town will prohibit activities that result in hazards to erosion protecting systems or actions that increase erosion or flood heights. • Uses vulnerable to floods shall be protected against flood damage at the time of construction. • Limits the amount of impervious surface within the floodplain area to protect the aquifer. • Requires residential construction to have the lowest floor elevated to or above base flood elevation plus 1 foot. • Filling shall not encroach natural watercourses, or floodplains, if fill is adjacent to a floodplain, it must have suitable protection against erosion during flooding periods.
	Plan of Conservation and Development	Sec. II Community Character • Strategy: Support actions that protect floodplains and that limit the development of flood-prone areas. Sec. IX.D Natural Resources: Water Resources • Floodplains: A floodplain is a broad and relatively flat area of a river or stream valley to either side of the main watercourse. This floodplain is formed by a series of flood events, which spill over the riverbanks and work and rework the sediment. A 100-year flood is a flood that has a one percent probability of occurring in a given year, or is likely to occur once every hundred years. • Federal Emergency Management Agency (FEMA) has determined areas within floodplains and their boundaries, and are delineated on the map titled FEMA Flood zones.
WATERSHED-LEVEL APPROACH IN REGULATIONS	Plan of Conservation and Development	Sec. IX.D Natural Resources: Water Resources • A watershed is defined as all the land and waterways that drain into the same body of water. All the surface water that drains Meriden's 24 square miles begins its flow at the highest point of one of six subregional watersheds. These watersheds are delineated on the map titled Subregional Watersheds. • Watersheds define the natural drainage systems in Meriden, and managing these watersheds in a sustainable manner is critical to ensure that the attributes they contain and the benefits they provide will be around for years to come. Sec. VIII.C Community Facilities: Goals and Objectives • Develop a program of property identification and acquisition to protect the watersheds and aquifers that provide the City of Meriden with its drinking water.
PESTICIDE REDUCTION	Subdivision Regulations	Title V Stormwater Management Plan • Definition of dirty water includes fertilizers and pesticides, and asks that applicant employs best available technology in design of the drainage system for dealing with Dirty Water.

MUNICIPAL SEWER/WWTP FACILITIES	Town Ordinances Subdivision Regulations	Sec. 170-3 Use of Public Sewers • Owners may be required to install a building sewer to connect the building drain to the public sewer. Sec. 3.53 Utilities • All lots shall be served with sanitary sewers, wherever feasible. The Planning Commission may require the developer to extend sanitary sewers if the subdivision is within reasonable distance of an existing sanitary sewer. Where a street ends with a temporary cul-de-sac, sewers shall be extended to the property line.
	Town Ordinances	Sec. 170-3 Use of Public Sewers • It shall be unlawful for any person to construct or repair any privy, privy vault, septic tank, cesspool or other facility intended for the disposal of sewage if public sewers are available. Sec. 176-36 Permit Required • It shall be unlawful for any person to install, repair or alter any subsurface sewage disposal system in the City without a permit issued by the Division of Health, and construction on a building served by such system cannot commence until the system is approved.
ON-SITE SEPTIC SYSTEMS	Subdivision Regulations	Sec. 3.53 Utilities • Septic Tanks: Individual septic tanks may be permitted where the Planning Commission considers it not feasible to extend sanitary sewers.

2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Town Ordinances	Ch. 196: Trees and Shrubs (Tree Ordinance) - Regulates the planting, maintenance, and removal of trees, shrubs, and other plants within the public way or on public land. - Tree Warden is responsible for enforcing all provisions of law for the preservation of trees and shrubs, and for producing an Urban Forestry Plan. - No person may perform any action affecting a tree without a permit from the Tree Warden.
	Zoning Regulations	Sec. 213-40 Ridgeline Protection Zone - Only allows selective timbering (harvesting of no trees greater than six inches dbh) at least 50 feet away from ridgelines. Sec. 213-50 Extraction and Excavation Regulations - An inventory of all existing trees over twelve-inch caliper and other significant flora and fauna shall be submitted. Removal of trees over twelve-inch caliper shall be discouraged.
	Subdivision Regulations	Title I – Guidelines for Developers - Endorses saving trees as much as possible. Sec. 3.59 Street Trees - Specifications for tree planting along streets.
	Zoning Regulations	Section 213- 22 Residential Historic District - The Residential Historic R-H District is intended to protect and enhance Meriden's historically significant residential structure. - The Zoning Commission may create a residential historic district within any residential area if the neighborhood meets certain standards.
CULTURAL LANDSCAPES	Plan of Conservation and Development	Sec. II Community Character Goal: Maintain and Enhance the Contributions of Historic Resources and Open Space to Meriden's Community Character.

INVASIVE SPECIES CONTROL		
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3. DRINKING WATER AND AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION	Zoning Regulations	Section 213-7 Definitions • <i>Aquifer Protection Area, Level A:</i> An underground drinking water supply protection area shown on the Zoning Map, defined in Connecticut General Statutes § 22a-354h, approved by the Commissioner of DEP, and protected within Meriden by the City Aquifer Protection Agency (APA) regulations and the state. • Depicts Aquifer Protection Zone of Meriden and of abutting municipalities.
	City of Meriden, CT Zoning Map	
LOCAL AQUIFER PROTECTION AGENCY	Plan of Conservation and Development	Section IX Natural Resources • Aquifer Protection Areas: This designation identifies critical water supply areas requiring protection from pollution by managing land use. The City of Meriden is in the process of drafting aquifer maps, and will likely model future aquifer protection regulations off of the DEP regulations. Section IX.D Natural Resources – Water Resources • Mentions City Aquifer Protection Agency
	Plan of Conservation and Development	
AQUIFER PROTECTION REGULATIONS	Town Ordinances	Ch. 110: Floodplain Management • Purpose is to protect the aquifer within floodplains. • Protecting the aquifer for use as a public water supply, by limiting the amount of impervious surface within the floodplain area, and reducing the effect of de-icing salts, chemicals and other pollutants.
	Subdivision Regulations	Title V. Stormwater Management Plans • Definitions – <i>Aquifer:</i> A geologic formation, group of formations or part of a formation that contains sufficient saturated, permeable materials to yield significant quantities of water to wells and springs. State/City recognized public drinking water Aquifer Protection Areas are shown on the Zoning Map.

	Plan of Conservation and Development	Section IX.D Natural Resources – Water Resources • Defines aquifers and locates them in Meriden. • Meriden is in the process of drafting regulations that would limit the types of land uses that could be sited in the “protection area,” which coincides with the well recharge area of the aquifer.
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4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT/ GREEN INFRASTRUCTURE	Subdivision Regulations	Title V. Stormwater Management Plans - Encourages low impact development throughout this guidance. - The goal of LID is to maintain or replicate predevelopment hydrology through the use of small-scale controls integrated throughout the site to manage runoff as close to its source as possible. This involves strategic placement of lot-level controls to reduce runoff volume and pollutant loads through infiltration, evapotranspiration, and reuse of stormwater runoff. - Although alternative site design and LID practices may not replace the need for conventional stormwater controls, the economical and environmental benefits of LID practices generally include: cleaner water, reduced stormwater related infrastructure and outlay cost, and “green” vegetative plantings supported by rain water. LID practices described in the following sections include: Vegetated Swales, Buffers, and Filter Strips; bioretention/Rain Gardens; dry Wells/Leaching Trenches; rainwater Harvesting; and vegetated Roof Covers (Green Roofs).
	Town Ordinances	Ch. 110 Floodplain Management Protecting the aquifer for use as a public water supply, by limiting the amount of impervious surface within the floodplain area, and reducing the effect of de-icing salts, chemicals and other pollutants.
IMPERVIOUS COVER	Subdivision Regulations	Title IV. Street Construction Specifications – Construction Standards - Plot plans showing proposed development and identifying necessary improvements should be submitted for any projects that increase impervious surface greater than 2,500 square feet or greater than 25% of the property. Title V. Stormwater Management Planning - A stormwater management plan needs to be updated and reviewed when the approval pertains to development at a site with one acre or more of impervious cover where any new impervious surface has been or is proposed to be created. - Definitions – <i>impervious surface</i>: material or structure on, above or below the ground that does not allow precipitation or surface water to penetrate directly into the soil. - Low impact stormwater management practices suggest limiting impervious surfaces as much as possible.

	Plan of Conservation and Development	Sec. X. Parks, Recreation and Open Space Implementation strategy: Establish regulations that limit impervious surface coverage to levels appropriate for each zoning district.
DESIGN REVIEW	Town Ordinances	Ch. 41 Property Acquisition and Disposal Sec. 41-2A - Prior to submission to the City Council for approval, an "Economic Development Task Force" will review the plans.
	Zoning Regulations	Sec. 213-64.1 – Function of the Design Review Board The Design Review Board shall serve as an advisory board to the Planning Commission. Said Board shall approve the alterations to exteriors of structures only. All recommendations shall be in conformance with the unified design plan.
	Subdivision Regulations	Sec. 3.50 – Design Standards - Contains detailed standards for: streets, sidewalks, utilities, lot grading, soil erosion and sediment controls, street signs, street lights, fire hydrants, street trees, etc. Sec. 4.31 Subdivision Plan Data - Subdivision Plan approval application must be accompanied by detailed map and narrative including specific data as set forth herein.
ALTERNATIVE DEVELOPMENT DESIGNS	Zoning Regulations	Art. VII Special Districts Allow for alternative/mixed use/cluster development configurations and variety and flexibility in land development.
	Subdivision Regulations	Title I Guidelines for Developers - Encourages using cluster-style subdivisions to conserve natural beauty, follow the nature of the land, beautify open space, and encourage pedestrian circulation over sprawl Sec. 3.55 Erosion and Sediment Control - Encourages use of alternative methods for erosion and sediment control with prior approval of Commission. Title V. Stormwater Management Plans - Encourages alternative site design and LID practices, but still stress importance of meeting practical and conventional needs for stormwater controls.

	Plan of Conservation and Development	Sec. IV - Housing Future Multi-Family Housing Development - should be primarily concentrated in mixed use and transit-oriented developments (TOD). TODs can range from planned developments that combine transportation, residential and commercial developments on one unified site to something as simple as allowing slightly greater housing density in a radius around bus or train stations. Any mixed use developments or TODs that are constructed or designed in Meriden should not be “cookie cutter” applications of projects from other communities, but rather should be tailored to Meriden’s unique character, density and urban design elements.
DENSITY BONUS		
MINIMUM BUILDABLE AREA	Zoning Regulations	Sec. 213-36D Regional Development District - Development Standards All regional developments shall have a minimum of 200 feet of frontage on a City street.
UNBUILDABLE LAND		
MIXED LAND USE	Zoning Regulations	Sec. 213-27 Transit Oriented Development (TOD) District - The purpose of the TOD District is to support a viable mixture of uses and implement the Smart Growth principles set forth in the 2012 Meriden TOD Master Plan. - Emphasize mixed-use with a focus on developing financially viable and socially stable mixed-income housing with supporting commercial and retail uses. - Defines mixed-use development: The development of a site or building with two or more different principal or primary uses, including, but not limited to, residential, commercial, industrial, institutional and other uses permitted in this chapter. The uses may be located in one or multiple buildings. Sec. 213-32 M-4 Planned Industrial District - Allows for different and mixed uses, including industrial, institutional, public, municipal, office and commercial uses.

	Plan of Conservation and Development	Sec. IV – Housing • Future Multi-Family Housing Development - should be primarily concentrated in mixed use and transit-oriented developments (TOD). Sec. XI 5 Future Land Use Plan, Mixed Use Land Use Categories • Identifies 3 categories: Neighborhood commercial; mixed-use residential/commercial/office; and mixed use office/residential. Describes possible limits of each and where they should be located within City.
INTERIOR/ REAR LOTS	Zoning Regulations	Sec. 213-7 Definitions • <i>Rear lot</i>: A lot located in such a position that it is to the rear of some other lot fronting on the same street and served by means of an accessway. • <i>Interior lot</i>: A lot other than a corner lot or through lot. Sec. 213-37 Active Adult Cluster Developments • Rear lots within the Active Adult Cluster Developments (AACD) shall be permitted so long as each rear lot is a minimum of 1-½ times the minimum lot requirement. Rear lots within the Planned Development District (PDD) are allowed for single-family lots only. Sec. 213-48(B) Rear Lots • Permitted only in certain residential districts. • Access to rear lot shall be provided by an accessway meeting certain requirements. • Consideration shall be given to buffering the rear lot from adjacent properties. Every effort must be made to retain existing natural buffers in setback areas.
BOND REQUIREMENTS	Zoning Regulations	• Bonds may be requested in the following contexts: Soil erosion and sediment control; site plan approval; extraction and excavations; planned residential development districts; planned elderly housing community; regional development district; planned executive office development district; active adult cluster developments; transit oriented development (TOD) districts.

	Subdivision Regulations	Title VI, Sec. 9.00 Bonding of Improvements • The Planning Commission may require bonds to assure completion of public utilities, soil erosion and sediment controls, or other improvements, and to assure that the development is completed as finally approved. • If the Planning Commission accepts performance bonds, the bonds shall be for a minimum period of two (2) years and shall be renewed periodically as necessary and as required by the Planning Commission. If a bond is not renewed, the Planning Commission may demand that under no circumstances shall further building permits or Certificates of Occupancy be issued and no unoccupied building shall be used or occupied for any purpose not specifically authorized by the Planning Commission. The Planning Commission may seek appropriate court orders or civil or criminal penalties.
OPEN SPACE REQUIREMENTS	Zoning Regulations	Sec. 213-2 Purpose • To provide adequate open spaces for light and air. Sec. 213-34 Planned Residential Development District • Definitions – <i>common open space</i>: A parcel or parcels of land designed and intended for the use and enjoyment of residents of the planned residential development, not to include areas devoted to residential or commercial buildings and structures or parking areas.
	Subdivision Regulations	Title I. Guidelines for Developers • Conserve natural beauty and follow nature of the land by dedicating open space, beautify the open space with landscaping. Sec. 3.66 Public Open Spaces • Unless otherwise stipulated and approved by vote of the Commission, 15 percent of the total area of a subdivision shall be set aside for open spaces or parks. Such land shall be of such location, shape, topography and general character as to meet the purpose of these regulations, as determined by the Commission. • Such land shall abut and have direct public access to a public street except in cases where subdivision access is through a private street or no access will serve the public interest. • Unless otherwise approved by the Commission, the ratio of wetlands/watercourses, floodplain or steep slopes offered to meet the open space requirement shall be no greater than the ratio of land with such features to land without such features of the entire tract. • Encourages use of conservation easements to permanently protect the land. • Exemption – less than five lots in the subdivision and no adjoining land and other requirements.

		Sec. 4.31 Subdivision Plan Data • Application must include location of proposed open spaces. Title VI, Sec. 8.00 Application for Final Approval • Performance bond or guarantee may be required to assure completion of open space requirement.
	Plan of Conservation and Development	Sec. X Parks, Recreation and Open Space • Explanation of why open space is important • Inventory of existing open space • Goals and implementation strategies to promote and increase open space:
	FEES IN LIEU OF OPEN SPACE	Sec. X.C Parks, Recreation and Open Space –Implementation Tools and Techniques • City may use fees collect in lieu of open space dedication to outright purchase of land where the City or designated non-profit (i.e. land trust) has full control over the land title. • In cases where the Planning Commission determines that the open space dedication mandated by the subdivision regulations should not be required, the City may accept a fee not to exceed 10% of the value of the subdivided land, or a combination of fee and land, which can be used to purchase priority open space elsewhere in the community that may have higher open space value.
TRANSFER OF DEVELOPMENT RIGHTS		
PLANNED RESIDENTIAL DEVELOPMENT	Zoning Regulations	Sec. 213-34 Planned Residential Development District • Creates PRD District to provide variety and flexibility in land development for residential purposes to meet changes in technology and demand that will be consistent with the best interests of the City.

NEW HAVEN

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Zoning Regulations	Sec. 58 Soil Erosion and Sediment Control - The purpose of soil erosion and sediment control is to minimize land form change that occurs as a result of development, to preserve the nature of a site, to sustain aesthetic, recreational and fish and wildlife habitat and values, to maintain the capability of soil to support vegetation, to reduce sediment entering water bodies and sewers, and to conserve and protect the water, land, air, and other environmental resources of the City. <i>Soil erosion and sediment control (SESC) plan</i>: A clear delineation of specific measures that minimize or eliminate soil erosion and sedimentation resulting from development. Such plan shall include, but is not limited to, an application form, a narrative, and a map or maps. The narrative shall describe the project, the schedule of major activities on the land, the application of conservation practices, design criteria, construction details and the maintenance program for any erosion and sediment control facilities that are installed. The map(s) shall show topography, cleared and graded areas, proposed area alterations map(s) and the location of and detailed information concerning erosion and sediment measures and facilities. - A soil erosion and sediment control plan (hereinafter SESC plan shall be submitted with any application for development when (I) the site of such development is one-half acre or more, unless exempted below; or (II) more than 30% the total lot area will be regarded by more than two feet; or (III) more than 800 cubic yards of soil and/or rock will be moved, removed or added; or (IV) the site contains slopes of greater than 15 percent; or (V) the application pertains to any site within the coastal boundary as defined in Section 22A-94 of the General Statutes. - Exemptions: Single family dwellings not part of a subdivision or larger development of land; existing activities; certain listed agricultural activities. - Plan Requirements: The SESC plan shall include an application form, a narrative, and a map, as described below. - See section for additional details on application requirements, inspection, and enforcement.

	Plan of Conservation and Development	Sec. VII Environment Recommendation - Promote natural infiltration measures for sedimentation and erosion control and effective stormwater management and thus reduce urban heat island effect. To that end, continue to implement the City's green regulations through the City's site plan review process.
SLOPES	Code of Ordinances	Sec. 46(d) – Junk yards, automobile recycling facilities, and scrap metal processing facilities (4)(c) - No new facility or portion of a facility shall be located on a slope exceeding twelve percent in grade, or so situated on a bluff as to be visible from an adjacent public highway or residence located above or below the level of the facility.
	Zoning Regulations	Sec. 58 Soil Erosion and Sediment Control SESC application is required when the site contains slopes greater than 15%.
	Flood Damage Prevention	Sec. 5.3.4.6.3 Slope of fill will not cause wave run-up or ramping.
STORMWATER MANAGEMENT	Code of Ordinances	Ch. 26 – Stormwater Discharges - Sec. 26-6 Definitions: <i>Stormwater runoff</i> or <i>stormwater</i> means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation. <i>Structural stormwater control</i> means a structural stormwater management facility or device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow. - Sec. 26-21 – Prohibition of illicit discharges: No person shall throw, drain, or otherwise discharge, cause, or allow others under its control to throw, drain, or otherwise discharge into the municipal separate storm sewer system any pollutants or waters containing any pollutants, other than stormwater.

	Zoning Regulations	Sec. 60 – Stormwater Management Plans • It is, therefore, the purpose of this ordinance to protect and preserve the waters within New Haven from nonpoint sources of pollution through the proper management of stormwater flows and minimization of inputs of suspended solid, pathogens, toxic contaminants, nitrogen, and floatable debris to these flows. • Definitions - <i>Urban stormwater runoff</i>: Precipitation that falls onto the surfaces of roofs, streets, parking lots, roads, and the grounds of developed areas. Urban precipitation is not absorbed by the ground or retained in its surface, but collects and runs off, carrying a wide variety of pollutants such as oil-based contaminants, heavy metals (copper and lead), nutrients, and bacteria. • A stormwater management plan shall be included as a part of any application for zoning approval (including but not limited to special permit and special exception), coastal site plan review, or an inland wetlands permit where: - The application pertains to a development or construction disturbing one-half or more acres of total land area on a site; or - The application pertains to any site with one-half acre or more of existing and/or proposed impervious cover; or - The application proposes new residential development of three or more units; or - The application pertains to any new or expanding industrial or commercial use which increases the amount of on-site impervious surface by more than 500 square feet; or - The application pertains to any site within the coastal boundary as defined in section 22a-94 of the General Statutes; or - The commission which has jurisdiction over the application has required submission of a stormwater management plan pursuant to written findings by that commission that the activity proposed in the application has the potential to cause significant nonpoint source pollution to groundwater or surface water drinking supplies, or to Long Island Sound, or any other waters of the state. • See section for plan requirements and standards and criteria for decision.
	Plan for Conservation and Development	Sec. VII Environment • Promote natural infiltration measures for sedimentation and erosion control and effective stormwater management and thus reduce urban heat island effect. To that end, continue to implement the City's green regulations through the City's site plan review process.

UPLAND REVIEW AREAS	Zoning Regulations	Sec. 57 Inland Wetland and Watercourse Regulations • (b) All activities <i>within 50 feet of inland wetlands</i> or watercourses shall be in accordance with the Regulations for the Protection and Preservation of Inland Wetlands and Watercourses.
VERNAL POOLS		
RIPARIAN BUFFERS		
FLOODPLAIN MANAGEMENT	Flood Damage Prevention	Sec. 1.3 – Statement of Purpose • It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to: - 1.3.1 Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; - 1.3.2 Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; - 1.3.3 Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; - 1.3.4 Control filling, grading, dredging and other development which may increase erosion or flood damage; and - 1.3.5 Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands. Sec. 3.1 – Lands to which this Ordinance Applies • This ordinance shall apply to all areas of special flood hazard within the jurisdiction of the City of New Haven. Sec. 3.3 – Establishment of the Floodplain Development Permit • A Floodplain Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities to be undertaken in a Special Flood Hazard Area.

		Sec. 3.4 – Compliance No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this ordinance and other applicable regulations. See source for specific requirements on flood hazard reduction and construction, as well as standards for subdivision proposals and variance procedures.
	Plan for Conservation and Development	Sec. VII Environment - Discusses flood mitigation - Guiding principle for recommendation: Protect floodplains from inappropriate development so as to prevent the loss of life or property due to flooding. - Recommendations for Flood Protection: - Continue to update and adopt the <i>City of New Haven Natural Hazard Mitigation Plan</i> (last updated in 2011) to identify locations prone to frequent flooding within the city and seek funding opportunities to implement strategies to correct existing coastal, as well as inland flooding issues within the city. - Continue to enforce the city's floodplain ordinances to limit development in Special Flood Hazard Areas (SFHAs) of the city, as identified by FEMA. To that end, publish the updated flood maps for the city (last updated in 2013) online that show locations of all SFHAs within the city and base flood elevations (BFEs) on all parcels.
WATERSHED-LEVEL APPROACH IN REGULATIONS		
PESTICIDE REDUCTION		

MUNICIPAL SEWER/WWTP FACILITIES	Code of Ordinances	Ch. 25 - Sewers • Sec. 25-1 – Definitions - City's sanitary sewer system: All sanitary sewer systems and extensions or enlargements thereof, owned by the city or in which the city has an equity of ownership and there is specifically included all the systems constructed by persons as that term is defined herein, and which have heretofore or may hereafter be acquired by the WPCA. Included in such definition but not limited to, are the following: Sanitary sewer systems, sewers, sewage works, public sewer, public sewer system, sewage system, sewerage system and all facilities for collecting, conveying, pumping, treating and disposing of sanitary sewage and industrial waste water. • Encourages connection to municipal sewer through proper approval process. Ch. 26 – Stormwater Discharges • The purpose of this chapter is to protect the public health, safety, environment and general welfare through the regulation of non-stormwater discharges to the municipal separate storm sewer system to the maximum extent practicable as required by federal law. • Sec. 26-6 Definitions - Municipal separate storm sewer system: any facility designed or used for collecting and/or conveying stormwater, including but not limited to any roads with drainage systems, highways, municipal streets, curbs, gutters, inlets, catch basins, piped storm drains, pumping facilities, structural stormwater controls, ditches, swales, natural and man-made or altered drainage channels, reservoirs, and other drainage structures, and which is: Owned or maintained by the City of New Haven, not a combined sewer, and not part of a publicly-owned treatment works.
	Plan of Conservation and Development	Sec. VII Environment • Sewage from New Haven, Hamden, East Haven, and Woodbridge is pumped through 30 pump stations to the East Shore Water Pollution Abatement Facility in New Haven where it is treated and discharged into New Haven Harbor. • Recommendations: - Continue to seek improvements to upstream wastewater treatment facilities and support statewide regulation of non-point sources of pollution. - Promote aggressive implementation of sewer separation throughout the city by GNHWPCA, as proposed within the CSO LTCP (1999).

ON-SITE SEPTIC SYSTEMS	Code of Ordinances	Sec. 24-3 Permit to Construct or Use Cesspools, Septic Tanks Required • It shall be unlawful for any person to construct, lay, use, or cause a cesspool, septic tank or subsurface sewage disposal system to be constructed, laid or used within city limits without a written permit from the health director. Similarly, no pipes may be connected to a cesspool or septic tank without a written permit from him/her. The health director is authorized to grant such permits. The fee for said permit shall be as set out in this Code as amended from time to time. • No repairs, alterations or expansions of subsurface sewage disposal systems shall occur without the health director's approval.
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2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Code of Ordinances	Ch. 18 -34: Trees and Shrubs – Injury To • Every person who shall, without the permission of the department of parks and recreation, cut, bruise, injure or destroy any tree or shrub for shade, ornament or use in any street or public square in said city, shall be guilty of a misdemeanor and upon conviction shall be punished by a fine of not more than fifty dollars (\$50.00) for each offense. Every person who shall fasten any horse or other animal to any shade tree in any street, or who shall place or leave any horse or other animal in such a manner that it may injure any such shade tree, shall be guilty of a misdemeanor and upon conviction shall be punished by a fine of not less than two dollars (\$2.00) nor more than fifty dollars (\$50.00) for each offense. Ch. 19 – Parks, Recreation and Trees • Sec. 19-5(5) - Structures, plants, trees, earth, water. No person shall . . . dig or remove any soil, rock, sand, stone, tree, shrub, plant, wood or other material, or make any excavation by tool, equipment, blasting or other means or agency . . . damage, cut, carve, mark, transplant or remove any plant, injure the bark, pick a flower or seed of any tree or plant, dig or otherwise disturb grass in any area, or in any other way injure the natural elements of any park area.
	Plan of Conservation and Development	Sec. VII Environment • In 2009, the City of New Haven partnered with URI and announced a five-year commitment of planting 10,000 trees in the city, i.e., up to 2,000 each year. To date, the city planted an average of 600 trees between 2009 and 2014 and is set to reach its target of planting 10,000 trees by 2016. • Recommendations: - Continue to retain existing trees, to the extent possible, and aim at further increasing the tree canopy to improve aesthetics and public health, as well as mitigate adverse effects of air pollution.

		- Continue to foster partnership between the City and URI to establish a goal for enhancing the tree canopy in New Haven for the next decade similar to the Tree Haven 10K pledge for the city for the 2010-2014 period. To that end, the Commission recommends that the tree canopy should be enhanced in those parcels or blocks where there is minimal or no tree canopy with relatively large amount of impervious surface. - Encourage private retailers and businesses to increase trees on their properties by offering incentives such as free planting materials and landscaping assistance. To that end, emphasize the value of urban forestry and tree programs to the city's quality of life through intensive community education and implementation programs. - Continue to maintain existing city trees and encourage preservation of on-site (healthy) trees, to the extent possible, for all development/utility projects. Encourage replacement of trees that could not be preserved due to unhealthy condition. The Commission further recommends that efforts should be made to monitor, maintain, and enhance the city's elm trees. - Allocate adequate resources for the Parks Department to inventory trees, assess the health of the trees, and document and update the City's tree inventory. - Continue to promote the City's Adopt a Tree program, through which residents can partner with the City to care for and improve the appearance of a tree.
HISTORIC PRESERVATION	Code of Ordinances	Art. X, Div. 7 – Historic District Commission • Establishes historic district commission to regulated manner in which building or structure is changed within historic district. Any action requires approval of commission. Art. X, Div. 9 – Municipal Preservation Board • Establishes municipal preservation board to prevent unreasonable destruction of historic structures and landmarks, and recommend properties or districts to be nominated by the state historic preservation board for inclusion in the National Register of Historic Places.
	Zoning Regulations	Sec. 54 – Historic District • These districts exist to distinguish and preserve areas of the city which are unique for their historical and architectural values and which therefore promote the educational, cultural, and general welfare of the public through their continued existence. Regulated by Historic District Commission.

		• No building or structure shall be erected, altered, restored, moved or demolished within an historic district until after an application for a certificate of appropriateness as to exterior architectural features has been submitted to the commission and approved by said commission. • If the Commission determines that the proposed erection, construction, restoration, alteration, or razing will be appropriate, it shall issue a certificate of appropriateness. In passing upon appropriateness the Commission shall consider, in addition to any other pertinent factors, the type and style of exterior windows, doors, light fixtures, signs, above-ground utility structures, mechanical appurtenances and the type and texture of building materials. In passing upon appropriateness as to exterior architectural features the Commission shall also consider the historical and architectural value and significance, architectural style, general design, arrangement, texture and materials of the architectural features involved and the relationship thereof to the exterior architectural style and pertinent features of other structures in the immediate neighborhood. A certificate of appropriateness may be refused when its issuance, in the opinion of the Commission, would be detrimental to the interest of the historic district.
Flood Damage Prevention	Sec. 2 – Definitions	• 2.1.24 <i>Historic structure</i>: Lists criteria for determining historic structure (essentially whether it is listed on any federal, state or local inventory of historic places).
Plan of Conservation and Development	Sec. IV Housing and Neighborhood Planning	• Recognizes New Haven's rich historic resources, including 19 National Register Historic Districts. New Haven is Certified Local Government (CLG) under the National Historic Preservation Act. • Recommendations for Historic Preservation: - Maintain the City's status as a Certified Local Government and utilize available funding streams. - Adhere to a preservation-based philosophy to ensure high quality efforts across a broad spectrum of uses, depending on the financial viability of the situation. To that end, encourage thoughtful conversion of some of the existing NRDs into local districts, e.g., Chapel Street, Ninth Square, Trowbridge Square, Orange Street, Dwight, and the Green. - Educate property owners about Secretary of Interior's design standards for all renovations/new constructions proposed within the historic districts, and about the available historic tax credit programs.

		- Maintain accurate inventory of eligible historic properties in City's database to inform planning and development actions appropriately and create an interactive web page to make it publicly accessible. - Identify historic structures that can be successfully used to meet the City's affordable housing goals. Low-income housing and historic rehabilitation tax credits can be combined when historic structures are rehabilitated for affordable housing. - Collaborate with the New Haven Preservation Trust, State Historic Preservation Office, and other local stakeholders to develop historic identity and landmark location signs, implement gateway signage, and embed historic themes within marketing products for city neighborhoods. - Encourage and support the inclusion of eligible historic resources within the National Register of Historic Places. To that end, pursue NRD nomination for Elm Street, which is listed as eligible for NRD status. - Promote inter-agency cooperation and coordination to implement the most effective preservation programs and services. - Explore new ways to promote awareness and appreciation of New Haven's historical heritage and resources such as seeking "Preserve America" designation for the city.
CULTURAL LANDSCAPES	Plan of Conservation and Development	Sec. III. Land Use • Recognizes cultural/religious/charitable/non-profit existing land uses.
INVASIVE SPECIES CONTROL	Plan of Conservation and Development	Sec. VII Environment • At West River, invasive phragmites and other species have gradually replaced the salt loving marsh grasses, resulting in a less diverse, less productive flood plain. • A new master plan addresses recreation and ecological needs, including areas for salt marsh restoration, a circuit path and areas for wildlife refuges.

3. DRINKING WATER/AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION		
LOCAL AQUIFER PROTECTION AGENCY		
AQUIFER PROTECTION REGULATIONS	Aquifer Protection Regulations	Sec. 60 Stormwater Management Plans Definitions – <i>Aquifer</i>: Geologic formation, group of formations, or part of a formation that contains sufficient saturated, permeable materials to yield significant quantities of water to wells and springs.

4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT / GREEN INFRASTRUCTURE IMPERVIOUS COVER	Plan of Conservation and Development	Sec. III Land Use - Guiding principle – Encourage pipeless, low-impact developments that consume less energy and with no wastage of water. - Recommendation – Encourage energy conservation and low-impact development in new developments.
	Zoning Regulations	Sec. 11(a) Residential Uses in RS-1 District - Homes within RS-1 District have a maximum impervious surface area restriction of 70% of the lot. Sec. 60 Stormwater Management Plans (b) Definitions – <i>Impervious surface</i>: Material or structure on, above, or below the ground that does not allow precipitation or surface water to penetrate directly into the soil. - SWMP is required for all development with one-half acre or more of impervious cover, or expansion of an industrial or commercial use that increase impervious surface area by 500 square feet. Sec. 60.2 Reflective Heat Impact from Hardscape or Paved Surfaces - Requires applicants to meet certain paved surface standards to reduce amount of heat reflection. - Applicant must meet these conditions when site has more than ½ acre of impervious surface, or any industrial or commercial use or expansion which expands impervious surface by more than 500 square feet.
	Plan of Conservation and Development	Sec. III Land Use Recommendation - Elevate site development standards by reducing the amount of on-site impervious surface.

DESIGN REVIEW	Zoning Regulations	Sec. 64 City Plan Commission • Designs will be reviewed by CPC while giving advice to the zoning enforcement officer and the Board of Zoning Appeals. • Site plan must include anything CPC deems necessary, including but not limited to a boundary survey, locations and descriptions of all existing conditions, proposed changes, soil erosion and sediment control plan, etc. • Site plan review for large projects are advised to first go through the city engineer and/or the City Plan Department at which time a public hearing may be held.
ALTERNATIVE DEVELOPMENT DESIGNS		
DENSITY BONUS		
MINIMUM BUILDABLE AREA	Zoning Regulations	Sec. 11(a) Residential Uses in Single Family Residential Districts • Single-family detached dwellings have minimum lot area of 7,500 square feet, and the principal and accessory buildings cannot exceed 30% of the lot area, with front, back, and side yard requirements. Sec. 13(a) Residential Uses in Low-Middle Density Districts • Single-family, two-family, and multi-family buildings have minimum lot area of 6,000 square feet with specific minimum lot areas per dwelling unit. Total coverage cannot exceed 30% of lot area and has minimum yard requirements.
UNBUILDABLE LAND		
MIXED LAND USE	Zoning Regulations	Sec. 41 Description of Business Districts • <i>Business A-1 Districts – Neighborhood Center Mixed Use</i> - Intended as mixed-use districts with ground floor retail, small offices, and upper story residential dwellings • <i>Business D-3 Districts – Central Business/Mixed Use</i> – residential and office uses
INTERIOR/REAR LOTS	Zoning Regulations	Sec. 11 Single Family Residential Districts • Rear lots may be attained for single family dwellings
BOND REQUIREMENTS	Zoning Regulations	Sec. 58 Soil Erosion and Sediment Control • Commission may require a bond prior to any work being approved. Said bond will be returned upon successful completion and compliance with approved plans determined by site inspection. • Site development shall not begin until a plan is approved and any bond is posted. Sec. 65 Planned Developments • City Plan Commission can require posting of site restoration bond prior to issuance of building permit.

OPEN SPACE REQUIREMENTS	Zoning Regulations	Sec. 15 Special High Density/Sec. 16 General High Density Residential Districts • Within RH-1 districts, there are minimum open space requirements of 125 square feet per dwelling unit, or 100 square feet if elderly housing unit. • Open space shall be landscaped, unless developed for recreational utility. Sec. 19 Custodial Care Facilities • Custodial care facilities have a minimum exterior usable open space of 100 square feet per resident in a residential district and 75 square feet per resident in a business district.
FEES IN LIEU OF OPEN SPACE		
TRANSFER OF DEVELOPMENT RIGHTS		
PLANNED RESIDENTIAL DEVELOPMENT	Zoning Regulations	Sec. 65 Planned Developments • Planned Development Unit tracts must be between ½ to 2 acres for dwellings only, and between 1 and 2 acres for all other cases. • Planned Development District tracts must be over 1 acre if only dwellings or over 2 acres for all other cases. • Each application must have comprehensive existing conditions, site plans, traffic impact study, and anything else requested by Commission. • City Plan Commission conducts final review.

NORTH HAVEN

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Zoning Regulations	Sec. 8.1 Soil Erosion and Sediment Control - Each development application is required to submit a soil erosion and sediment control plan, which must be reviewed and approved before any work may begin. - The plan shall include a description of the development, schedule for grading and construction, design criteria for proposed control measures including stormwater management facilities, adjacent properties, and anything else deemed necessary by the Commission. - Plans shall abide by principles outlined in Chapters 3 and 4 of Connecticut Guidelines for Soil Erosion and Sediment Control. - During construction inspection will occur to ensure compliance and may deem additional provisions other than those already approved if necessary.
SLOPES	Zoning Regulations	Sec. 2.5 Cluster Subdivision Regulations - There shall be no construction of structures on slopes of 15% or greater. - No more than 10% of a lot may have land with slopes in excess of 25%. Sec. 8.1 Soil Erosion and Sediment Control - No embankment shall exceed a slope of 1 foot of vertical rise in 2 feet of horizontal distance.
STORMWATER MANAGEMENT	Zoning Regulations	Sec. 7.6 Special Permits in Aquifer Protection Zones - In order to reduce stormwater runoff, systems shall be implemented to minimize suspended solids and maximize groundwater recharge. - Any application should include a detailed drainage plan showing locations and points of discharge.
UPLAND REVIEW AREAS		
VERNAL POOLS		

RIPARIAN BUFFERS	Zoning Regulations	Sec. 8.7.1 Stream Buffer Regulation - In all development areas adjacent to the Quinnipiac River and Muddy River, there shall be established a fifty-foot greenbelt where no development can occur. Sec. 2.5 Cluster Subdivision Regulations - A 25-foot vegetative no disturbance set back must be maintained from any wetland and/or watercourse and be shown on the subdivision plan.
FLOODPLAIN MANAGEMENT	Town Ordinances	Sec. 121 Flood Damage Prevention Flood hazard zones are designated as being subject to a 1% or greater chance of flooding in any given year.
	Zoning Regulations	Sec. 2.5 Cluster Subdivision Regulations - Community Open Space shall be retained in perpetuity in part to reduce flooding and flood related damages. Sec. 8.7.1 Stream Buffer Regulation - Stream buffers are mandatory fifty feet along a river; maintained vegetated buffers absorb runoff mitigating flooding and some erosion problems. Sec. 8.9 Excavation, Removal, and Filling of Material - Any filling where the resulting grade shall be higher than an established flood plain must be kept at a distance from property or street line determined by Planning and Zoning Commission.
WATERSHED-LEVEL APPROACH IN REGULATIONS		
PESTICIDE REDUCTION		
MUNICIPAL SEWER/WWTP FACILITIES	Town Ordinances	Sec. 127-4 Collection and Transportation of Refuse No person other than this municipality shall engage in the business of collection, storage or removal of refuse in this municipality, unless such person shall first apply for and obtain a permit from the Director.
ON-SITE SEPTIC SYSTEMS		

2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Town Ordinances	Sec. 152 Parks and Playgrounds If as part of an excavation, a tree stump and/or roots may be buried so long as the area is suitably covered with earth material and not change any approved contours.
	Zoning Regulations	Sec. 8.7.9 Off-Street Parking Each parcel must preserve a minimum of 10% either in natural state of landscaped with ground cover shrubbery and evergreen or deciduous trees.
HISTORIC PRESERVATION		
CULTURAL LANDSCAPES		
INVASIVE SPECIES CONTROL		

3. DRINKING WATER/AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION	Zoning Regulations	Sec. 7.2 Aquifer Protection Districts • Aquifer Protection zones have been mapped and are available in the Planning and Zoning office. Designated areas show recharge areas and are entitled "Aquifer Protection Zones, Town of North Haven, Connecticut."
LOCAL AQUIFER PROTECTION AGENCY	Town Ordinances	Sec. 58 Planning and Zoning Commission • Planning and Zoning Commission is designated as the Aquifer Protection Agency. • At least one member must complete technical training formulated by the Commissioner of Environmental Protection.
AQUIFER PROTECTION REGULATIONS	Zoning Regulations	Sec. 7.5 Use Regulations for Aquifer Protection Districts • Road salt storage and loading facilities are prohibited in an aquifer-protected area. • No one shall manufacture, use, transport, store, or dispose of toxic and/or hazardous wastes. • There shall be no truck terminals, Sanitary Landfills, junkyards, salvage yards, motor vehicle service, washing stations of a commercial nature, disposal of snow from outside the zone, or on-site disposal of industrial waste. • Certain actions such as parking areas, minor tree removal, rendering impervious area, grading, or storage or disposal of goods may be permissible if a Special Permit has been granted. Sec. 7.6 Special Permits for Aquifer Protection Districts • Planning and Zoning Commission is responsible for reviewing applications.

4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT/ GREEN INFRASTRUCTURE	Town Ordinances	Sec. 53-3 Open Space Advisory Committee Open space is designated for only low-impact activities.
	Zoning Regulations	Sec. 8.2 Wireless Communications Site plans are encouraged to use low-impact infrastructure; e.g., installing a cable microcell network through the use of multiple low-powered transmitters to not require the use of added towers.
IMPERVIOUS COVER	Zoning Regulations	Sec. 7.5 Use Regulations for Aquifer Protection Districts Any rendering of impervious surfaces in excess of 20% of the lot area shall require special permit.
DESIGN REVIEW	Zoning Regulations	Sec. 10.1 Site Plan Approval - Designs will require review except for one-family, two-family, building accessory to one-family and two family dwellings, and municipal use. - Planning and Zoning Commission shall conduct review and approval so long as the site plan conforms to regulations. - Site should demonstrate a practical vehicular and pedestrian circulation system. - Site should have an understanding of potential adverse effects upon the established character or adjoining properties. - Plan should consider the impact on the environment and demonstrate an effort to minimize adverse effects.
ALTERNATIVE DEVELOPMENT DESIGNS		
DENSITY BONUS		

MINIMUM BUILDABLE AREA	Zoning Regulations	Sec. 2.5 Cluster Subdivision Regulations - For an R-20 district, minimum lot area shall be 17,000 square feet - For an R-40 district, minimum lot area shall be 30,000 square feet - No more than 10% of the lot may be wetland, with slopes in excess of 25%, or designated as flood hazard areas. - For an R-20, minimum width is 90 feet, front yard 50, side yard 10 each, rear 25. - For an R-40, minimum width is 125 feet, front yard 50, side yard 25 each, rear 25.
UNBUILDABLE LAND	Zoning Regulations	Sec. 2.5 Cluster Subdivision Regulations - Building is prohibited if in an R-20 the coverage is in excess of 20%, or in excess of 15% in an R-40. Building height may not exceed 35 feet in both R-20 and R-40 districts. - A 25-foot vegetative no disturbance set back must be maintained from any wetland and/or watercourse and be shown on the subdivision plan.
MIXED LAND USE	Zoning Regulations	Sec. 2.5 Cluster Subdivision Regulations - Elderly housing units shall be located in mixed use Commercial or Light Industrial Districts. Sec. 6.1 Village Center Planned Residential Districts - Shall be located within one-quarter mile of a mixed use Commercial Area.
INTERIOR/REAR LOTS	Zoning Regulations	Sec. 2.2 Residence Apartment Districts - A buffer strip not less than 20 feet wide shall be maintained along all side and rear lot lines except where adjacent to a lot occupied by another multiple dwelling property. Sec. 9.1 Area, Yard, Height, and Bulk Regulations - All rear lots shall have a horizontal clearance of 15' to be used for driveway area and a 15' vertical clearance.
BOND REQUIREMENTS	Zoning Regulations	Sec. 4.1 Limited Commercial Districts - Before a permit will be issued and before any work may begin, a bond consisting of a commercial surety company bond or cash shall be filed with the Planning and Zoning Commission. - If a bond is in excess of \$10,000 the plan must be reviewed by the Town Council before issuing a permit. - Bonded work shall be completed within 5 years of approved site plan date. Sec. 10.1 Site Plan Approval - The Commission reserves the right to retain 10%-15% of the bond for 12 months after the date of work completion to ensure that any work that arises after completion can be met.
OPEN SPACE REQUIREMENTS	Zoning Regulations	Sec. 2.5 Cluster Subdivision Regulations - In a cluster subdivision, any single Community Open Space parcel shall be no less than one acre. - A minimum of 10% of the gross land area must remain Open Space.

FEES IN LIEU OF OPEN SPACE			
TRANSFER OF DEVELOPMENT RIGHTS			
PLANNED RESIDENTIAL DEVELOPMENT	Zoning Regulations	Sec. 6.1 Village Center Planned Residential District • Outlines permitted uses for VCPRD. Sec. 8.5 Parking, Loading and Driveways • There shall be no less than 2 parking spaces per each unit in VCPRD. • Access to VCPRD shall be from an existing or proposed public street. • Driveways shall be not less than 150 feet from the intersection of the nearest street lines if on a corner lot. • Two-way drives shall not be less than 24 feet in width. • A buffer strip not less than 5 feet wide shall be maintained along all side and rear lot lines.	

PLAINVILLE

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Zoning Regulations	Sec. 4.06 Removal and Disposition of Earth Material - One of the purposes of the removal and deposition of earth material section is to limit soil and erosion sedimentation effects. Sec. 4.12 Soil Erosion and Sediment Control - All development and other activities shall make appropriate provisions for soil and sediment control. - Provisions shall be in accordance with Connecticut Guidelines for Soil Erosion and Sediment Control. - If a development requires a Special Permit, Special Exception, Site plan or Subdivision for more than ½ acre, a Soil Erosion and Sediment Control Plan must be submitted with the application. Sec. 7.02 Site Plan Application - Adequate control measures must be installed and maintained before any Zoning Permit will be issued. Sec. 10.01 Site Plan Checklist - Plan must include a narrative detailing methods of installation, maintenance, and emergency contact information.
SLOPES	Zoning Regulations	Sec. 1.04(B) Open Space Development - Not more than 50% of open space shall contain slopes in excess of 20% that extend 100 linear feet or more. Sec. 2.04(P) Business Zone Use Regulations – Redevelopment Design District - No more than 30% of the landscape shall be a slope of 20% or greater, unless designed to mimic natural and functional water feature, or as an aesthetically pleasing.

	Subdivision Regulations	Sec. IV - 2.00 Identification and Conservation of Natural and Cultural Features - Slopes in excess of 15% extending 100 feet or more shall be conserved Sec. IV - 12.00 Landscaping Standards - All roadway slopes steeper than 1 foot vertically to 3 feet horizontally shall be planted with appropriate ground cover.
STORMWATER MANAGEMENT	Zoning Regulations	Sec. 4.13 Stormwater Management - Any application or activity involving site plan approval, special exception approval, or subdivision approval and any application for construction of, or an addition to, a residential dwelling or accessory structure shall provide for a stormwater management system. - Said system shall implement Low Impact Development techniques in accordance with the LID and Stormwater Management Design Manual for the Town of Plainville.
UPLAND REVIEW AREAS	Subdivision Regulations	Part III Procedures Sec. 2 Application Requirements (2)(3)(e) Requires consideration of upland review areas.
	Wetland Regulations	Sec. 2 Definitions "Regulated activity" shall refer to within 100 feet from the boundary of any wetland or watercourse. Appendix C – Guidelines for Upland Review Areas - Entire guidance document dedicated to promoting upland review – what it is, why it is important, and how it should be included especially in subdivision context.
VERNAL POOLS	Plan of Conservation and Development	Conservation Themes: Open Space and Natural Resources – Protect Vernal Pools - Vernal pools are defined as seasonal pools of water found in depressions in the soil with no above ground outlet. - Vernal pools are not protected under any State or Federal program though some species that are protected rely on vernal pool habitats. - The Commission shall endorse a policy of no net loss of vernal pools. - The Commission will pursue a contract with a certified wetlands scientist or herpetologist to prepare a town-wide vernal pool study.
RIPARIAN BUFFERS	Wetland Regulations	Appendix C – Guidelines for Upland Review Areas - Riparian areas are protected aquatic habitats. - Any clearing, depositing, grubbing, grading or modification can have an adverse impact on riparian habitats thus is subject to regulated activities in upland review areas.

FLOODPLAIN MANAGEMENT	Town Ordinances	Ch. 225 Flood Damage Prevention • By issue of Flood Damage Prevention Ordinance, several provisions have been adopted to minimize losses in the event of flooding. • Uses which result in increasing in flood heights or velocities shall be restricted or prohibited. • Uses vulnerable to floods shall be protected against flood damage at the time of construction. • Activities that will unnaturally divert flood waters or increase flood hazards shall be prevented or appropriately regulated.
	Wetland Regulations	Appendix C – Guidelines for Upland Review Areas • The National Flood Insurance Program has mapped the boundaries of floodplain using a theoretical design flood on the watercourse and has no direct relation to location of wetlands or smaller watercourses on floodplain, so may not reflect reasonable boundary for upland review area.
WATERSHED- LEVEL APPROACH IN REGULATIONS		
PESTICIDE REDUCTION		
MUNICIPAL SEWER/WWTP FACILITIES	Town Ordinances	Ch. 332 Sewers • Sec. 332-3 - Owners may be required to install a building sewer to connect his building drain to the public sewer. • Sec. 332-4 - No unauthorized person(s) shall uncover, make any connections with or opening into, use, alter, repair, or disturb any public sewer or appurtenance thereof.
ON-SITE SEPTIC SYSTEMS	Town Ordinances	Ch. 332 Sewers • Sec. 332-3 - It shall be unlawful for any person to construct or repair any privy, privy vault, septic tank, cesspool or other facility intended for the disposal of sewage if public sewers are available.

2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Zoning Regulations	Sec. 1.04(D)(12) Common Interest Communities and Multi-Family Dwellings: Landscaping - Large individual and clusters of trees shall remain undisturbed and all trees to remain undisturbed shall be tagged prior to any site work. Sec. 303 Ridgeline Protection Overlay Zone - The applicant shall pay 150% of the estimated costs and the Town shall reimburse any overpayment. - Timbering shall not result in the removal of all trees within a 1000 square foot area, create large treeless gaps along the ridgeline, or expose large visible areas of any building as viewed from below the ridgeline setback area.
HISTORIC PRESERVATION		
CULTURAL LANDSCAPES		
INVASIVE SPECIES CONTROL	Zoning Regulations	Sec. 1.04(D)(12) Common Interest Communities and Multi-Family Dwellings: Landscaping Any planting of trees or shrubs in buffer areas shall be noninvasive.

3. DRINKING WATER/AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION	Aquifer Regulations	Sec. 3 Delineation of Aquifer Protection Boundaries • Delineation shall consist of the combined areas of contribution and recharge areas as shown on Level A maps approved or prepared by the Commissioner. • Said boundaries shall be delineated within 120 days after being notified by the Commissioner that an aquifer protection area is located in part or entirely within the Town of Plainville.
LOCAL AQUIFER PROTECTION AGENCY	Aquifer Regulations	Sec. 3 Delineation of Aquifer Protection Boundaries • The zoning and/or planning commission shall delineate the aquifer protection areas.
AQUIFER PROTECTION REGULATIONS	Aquifer Regulations	Sec. 3 Delineation of Aquifer Protection Boundaries • Delineation shall be made public by means of widely distributed newspaper with sufficient map, description, and contact information. • Regulated activities shall abide by the specifications in 22a-354 Connecticut General Statutes. • Any person conducting regulated activities must obtain a permit or exemption from the Commissioner. Sec. 4 Prohibited and Regulated Activities • Prohibits all regulated activities in aquifer protection areas, except as specified in this Section.

4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT/GREEN INFRASTRUCTURE	Low Impact Development and Stormwater Management Design Manual	- Plainville requires LID in compliance with their published design manual on LID and Stormwater management. - The focus of the regulations on the manual is to encourage conservation measures, reduce impervious areas, slow, reduce, and cleanse runoff, and prevent pollution. - Essentially supplies in-depth technical framework for LID and SWM strategies that will lead to improvement of water quality. - Anticipated application to all development projects proposed in town of Plainville.
IMPERVIOUS COVER	Zoning Regulations	Sec. 1.04(D)(6) Common Interest Communities and Multi-Family Dwellings: Special Exception and Site Plan Approvals - Impervious surface shall not exceed 50% of a site designated as open space. Sec. 3.03 Ridgeline Protection Overlay Zone - Impervious surface shall not exceed 20% of a site designated as a Ridgeline Setback area.
DESIGN REVIEW	Zoning Regulations	Sec. 5.01 Design Standards Design review will seek to ensure that the activity proposed will be in general harmony with the character and appearance of the surrounding area and not adversely affect the health, safety, or welfare of the inhabitants of the Town of Plainville.
ALTERNATIVE DEVELOPMENT DESIGNS		
DENSITY BONUS		
MINIMUM BUILDABLE AREA	Zoning Regulations	Sec. 1.03(A) Minimum Lot Requirements for Residential Zones - Minimum lot area is as follows in square feet: R-40 = 40,000; R-20 = 20,000; R-15 = 15,000; R-12 = 12,000; R-11 = 11,000; R-10 = 10,000; R = 8,750. - Minimum frontages area is as follows in feet: R-40 = 150; R-20 = 100; R-15 = 100; R-12 = 100; R-11 = 90; R-10 = 80; R = 70.
UNBUILDABLE LAND		

MIXED LAND USE	Zoning Regulations	Sec. 2.04(C) Residential/Mixed Use Business Zones Mixed use buildings are permitted to have residential dwelling units in Central Commercial and General Commercial Zones provided that 100% of the first floor level of the building is used for retail or office use.
INTERIOR/REAR LOTS	Zoning Regulations	Sec. 1.04(A) Rear Lots in Residential Zones - Rear lots shall be approved unless the topography of the land does not readily allow for one. - The area of a rear lot shall be at least 50% greater than the lot area requirement for the zone where it is located.
BOND REQUIREMENTS	Zoning Regulations	Sec. 7.02 Site Plan Application The Commission may require a performance bond to assure all provisions are met and if necessary resolve new erosion and sediment control plans.
OPEN SPACE REQUIREMENTS	Zoning Regulations	Sec. 1.04(D) Common Interest Communities and Multi-Family Dwellings - At least 20% of the total site area shall be set aside as open space, which does not include front, rear, and side setback requirements. - Not more than 50% of the open space shall contain wetlands, watercourses, and slopes in excess of 20% that extend 100 linear feet or more.
FEES IN LIEU OF OPEN SPACE	Subdivision Regulations	Sec. IV – 8.00 Fee in Lieu of Open Space - If certain conditions make on-site open space undesirable, the Commission may require the applicant to provide a fee in lieu of open space or a combination of land and fee. - This payment shall be no more than 10% of the fair market value of the land to be subdivided.
TRANSFER OF DEVELOPMENT RIGHTS		
PLANNED RESIDENTIAL DEVELOPMENT		

PROSPECT

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Zoning Regulations	Sec. 4.14 Erosion and Sedimentation Control - Any area to be disturbed must have submitted with an application a soil erosion and sediment control plan. - Provisions must control accelerated erosion and sedimentation and reduce the danger from stormwater runoff on the proposed site based on the best available technology. - Plan shall abide by methods detailed in the Connecticut Guidelines for Soil and Sediment Control. - Plan shall include but not be limited to a narrative of the project, time schedule, application of methods, existing and proposed technology. - The Town of Prospect Planning and Zoning Commission shall review plan and determine if in compliance.
SLOPES	Zoning Regulations	Sec. 3.7 Earth Excavation Sec. 3.7.6.5 – Slopes during Excavation: No slopes having a grade greater than one foot vertical to two feet horizontal shall be created during excavation within 150 feet of any property unless approved by the Zoning Enforcement Officer.
STORMWATER MANAGEMENT	Zoning Regulations	Sec. 3.7 Earth Excavation - At all stages of work, proper stormwater drainage shall be provided to prevent runoff, stagnant water, and damage to property, streams, or roads. - Drainage swales of gradual contour shall be provided to create positive flow. - Minor depressions may be developed if deemed appropriate by the Commission. - Unless otherwise instructed all design standards shall be at least in accordance with EPA Storm Water Phase II program.
UPLAND REVIEW AREAS	Wetland Regulations	Sec. 2 Definitions Regulated activity will be within 100 feet measured horizontally from the boundary of any wetland or watercourse.

VERNAL POOLS	Wetland Regulations	Sec. 2 Definitions
RIPARIAN BUFFERS		• Vernal pools are defined as a watercourse consisting of a confined basin depression with standing water usually trying out for part of the year during warm weather. • There will not be a permanent outlet for any fish but may require one or more obligatory species to be conclusively defined as a vernal pool.
FLOODPLAIN MANAGEMENT	Zoning Regulations	Sec. 4.13 Floodplains and Flood Hazard Areas • Floodplain management regulations were adopted by the community on February 23, 1977. • Special flood hazard areas have been designated namely Zones A and AE by FEMA. • Flood hazard areas are determined using the base flood elevations provided on the flood profiles on the Flood Insurance Rate Map. • Lowest floor must be raised to or above the BFE or be flood proofed to one foot above the BFE. • Areas designated as floodways may not have any activity that raise the flood level any amount without permitting from the Commission.
WATERSHED-LEVEL APPROACH IN REGULATIONS		
PESTICIDE REDUCTION		
MUNICIPAL SEWER/WWTP FACILITIES		
ON-SITE SEPTIC SYSTEMS		

2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Zoning Regulations	Sec. 3.7 Earth Excavation • All trees outside the permit area shall be protected from damage. Sec. 9.2 General Landscaping Requirements • Trees used shall be indigenous to the area and approved by the Commission. • Licensed arborist or landscape architect may be consulted. • Trees in good condition greater than four inches (DBH) shall be preserved unless approved by the Commission. • Prior to any work trees to be saved shall be tagged.
HISTORIC PRESERVATION		
CULTURAL LANDSCAPES		
INVASIVE SPECIES CONTROL		

3. DRINKING WATER/AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION		Available in Town Clerk's and Land Use Offices, according to Sec. 4.17 of Zoning Regulations.
LOCAL AQUIFER PROTECTION AGENCY		Available in Town Clerk's and Land Use Offices, according to Sec. 4.17 of Zoning Regulations.
AQUIFER PROTECTION REGULATIONS		Available in Town Clerk's and Land Use Offices, according to Sec. 4.17 of Zoning Regulations.

4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT/ GREEN INFRASTRUCTURE	Plan of Conservation and Development	Future zoning and subdivision regulations are encouraged to adopt comprehensive Low Impact Development into plans.
IMPERVIOUS COVER	Zoning Regulations	Sec. 3.2 Residential 1-Acre District - Impervious cover shall not exceed 30% of the area of a lot for RA-1 or RA-2 zones. - For B, IND-1, IND-2, and CP zones impervious cover shall not exceed 70%.
DESIGN REVIEW		
ALTERNATIVE DEVELOPMENT DESIGNS		
DENSITY BONUS		
MINIMUM BUILDABLE AREA	Zoning Regulations	Sec. 2.2 Definitions - Minimum buildable area shall be a contiguous area at least 18,000 square feet bounded by four sides with no side less than 100 feet in length and no angle less than 45 degrees. - No wetlands, watercourses, or water bodies shall be present within the Minimum Buildable Area. - No more than 25 percent of the Minimum Buildable Area shall contain slopes in excess of 25 percent. - The Minimum Buildable Area shall apply only to the RA-1 & RA-2 Zones.
UNBUILDABLE LAND	Zoning Regulations	Sec. 4.2.2 Residential Building Standards - No building may be built to a height greater than 35 feet. - Areas with steep slopes, high water tables, or shallow depth of bedrock may not be suitable for buildable land but may be appropriate for open space.
MIXED LAND USE	Zoning Regulations	Sec. 2.2 Definitions - Mixed Use Development will be defined as a single building containing more than one type of land use, or a single development of more than one building and land use. - The different types of land uses are in close proximity and thus planned as a unified complementary whole, and functionally integrated to the use of shared vehicular and pedestrian access and parking areas.

INTERIOR/REAR LOTS	Zoning Regulations	Sec. 2.2 Definitions - Rear lots shall have fee simple ownership of an access way, which shall be a minimum of 25 feet in width extending from the lot to the public road. - No rear lot is permitted to be located to the rear of another rear lot unless fronted from different streets. - Minimum lot size for a rear lot will be determined by 2 times the minimum lot size requirement for the underlying zone.
BOND REQUIREMENTS	Zoning Regulations	Sec. 4.11 Earth Excavation, Deposition and Regrading Activities - The commission may require a bond be posted prior to a site plans approval. - This bond will be based on the cost calculations provided by the applicant. Sec. 9.7 Bonding - The bond will not be released until a licensed landscape professional certifies that the installation of landscaping material meet the approved plans.
OPEN SPACE REQUIREMENTS	Zoning Regulations	Sec. 4.1 Elderly Housing - Not less than 1000 square feet per dwelling unit shall be provided as open space. - Not less than 60 square feet shall be immediately adjacent to each dwelling unit. - Must be usable - required paved vehicular areas, wetlands, and private outdoor space shall not be considered usable open space.
FEES IN LIEU OF OPEN SPACE	Plan of Conservation and Development	Fees in lieu of open space may be used to fund acquisitions of open space.
TRANSFER OF DEVELOPMENT RIGHTS		
PLANNED RESIDENTIAL DEVELOPMENT	Zoning Regulations	Sec. 4.1 Elderly Housing - Planned Residential Developments designed exclusively for Elderly Persons may be established in any RA-1, RA-2 or CP zone as a single parcel with a minimum of 5 acres. - Said development shall have approved private street and adhere to any provisions the Commission deems appropriate.

SOUTHINGTON

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Subdivision Regulations	Sec. 11 Activities Requiring Certified Erosion and Sediment Control Plan • If a subdivision development is cumulatively more than one-half acre a soil erosion and sediment control plan must be submitted with an application. • Unless otherwise approved by the Commission, the principles for decreasing erosion and sedimentation and stormwater runoff shall be in accordance with Connecticut Guidelines for Soil Erosion and Sediment Control. • Said plan shall have all relevant information regarding the development including but not limited to dates, sequence of grading and construction, installation of control measures, sequence of final stabilization. • Plan shall be approved by either a registered engineer, landscape architect, or certified soil scientist.
SLOPES		
STORMWATER MANAGEMENT	Aquifer Regulations	Sec. 12 Best Management Practices • Stormwater management plan must assure run-off is managed to prevent pollution of ground water. • Plan must comply with Connecticut General Status that list requirements for the General Permit of the Discharge of Storm Water associated with a Commercial Activity.
UPLAND REVIEW AREAS	Wetland Regulations	Sec. 2 Definitions • Regulated activity will refer to land 100 feet of the edge of the defined channel of the Quinnipiac River, Eight Mile, or Ten Mile River; within 200 feet of a bog; 100 feet of a stream; 50 feet of the centerline of an intermittent watercourse; 50 feet of a pond, lake, or regulated soil type; or 200 feet of a Vernal Pool.
VERNAL POOLS	Wetland Regulations	Sec. 2 Definitions • Land within 200 feet of vernal pool is regulated activity.

RIPARIAN BUFFERS		
FLOODPLAIN MANAGEMENT	Zoning Regulations	Sec. 6 Floodplain Zoning • A Development permit is required in compliance with floodplain management regulations prior to any activity. • The water holding capacity of the floodplain shall not be reduced, and any reduction that does occur shall be reconciled by deepening or widening the floodplain elsewhere. • Projects will assume a 100-year flood elevation model. • Encroachments are prohibited unless the applicant provides a certification by a registered professional engineer demonstrating there shall be no increase in flood levels. Applications for permits shall be made to the Town Planner. • If a structure resides in multiple flood zones, the provisions for the most restrictive zone will be applied.
WATERSHED- LEVEL APPROACH IN REGULATIONS		
PESTICIDE REDUCTION		
MUNICIPAL SEWER/WWTP FACILITIES		Ch. 345 Sewers • Sec. 345-8 – Director of Health shall not approve new subsurface sewage disposal system where public sewers are available and the connection thereto is feasible. • Sec. 345-13 – Connection shall be made to public sewer whenever feasible.

ON-SITE SEPTIC SYSTEMS		Ch. 345 Sewers • Sec. 345-4 – Except as otherwise provided, it is unlawful to construct a septic tank, cesspool, or other facility use for disposal of sewage. • Sec. 345-8 – Director of Health shall not approve new subsurface sewage disposal system where public sewers are available and the connection thereto is feasible. • Sec. 345-12 – No septic tank shall be discharged into any natural outlet. • Sec. 345-13 – If public sewer becomes available to property served by a private sewage disposal system, and upon failure and/or abandonment of such private sewage disposal system, connection shall be made to the public sewer when feasible. Any abandoned septic tanks, cesspools, and similar private disposal facilities shall be crushed and filled with suitable material.
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2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Town Ordinances	Sec. 364-36 Removal of Trees - Tree removal should be carefully avoided, unless it directly interferes with a building or other project. - If Town Engineer finds it necessary to remove tree, then he may authorize contractor to do so. - Details for proper removal are outlined in division 6. Ch. 364, Art. VII Removal of Trees - Unlawful to remove or trim trees until they receive permit to do so.
HISTORIC PRESERVATION		
CULTURAL LANDSCAPES		
INVASIVE SPECIES CONTROL		

3. DRINKING WATER/AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION	Aquifer Regulations	Sec. 3 Delineation of Aquifer Protection Area Boundaries Designation shall consist of combined areas of contribution and recharge as shown on Level A maps approved by the Commissioner.
	Zoning Regulations	Sec. 17 Aquifer Protection District - The areas identified as GAA, GAAs, GA1, GA2, and GB/GAA on the 1"=200' scale maps identified per Section 17-01 are as follows: - GAA Districts - Aquifers currently used as a source of drinking water supply. - GAAs Districts - Aquifers that recharge a surface water body currently used as a source of drinking water supply. - GA1 Districts - Aquifers that are not currently being used as a source of drinking water supply but have a potential to be developed as future sources of drinking water supply on a municipal scale based upon existing land use and hydrogeological data. - GA2 Districts - Stratified drift deposits that serve as secondary recharge areas adjacent to GAA or GA1 zones. - GB/GAA Districts - Aquifers which have been contaminated and have been used or are currently being used as a source of drinking water supply. Water from these resources requires treatment or dilution prior to potable use.
LOCAL AQUIFER PROTECTION AGENCY	Aquifer Regulations	Sec. 1 Title and Authority The Planning and Zoning Commission is established as the Aquifer Protection Agency.

AQUIFER PROTECTION REGULATIONS	Aquifer Regulations	Sec. 4 Prohibited and Regulated Activities • Specifies prohibited and acceptable activities within aquifer protection areas. Sec. 12 Best Management Practices • Hazardous materials may be stored above ground within aquifer protection area only under certain conditions. • No increase or replacement of underground storage tanks. • No uses of devices that allow release of waste water into the ground, such as floor drains or dry wells. • Materials management plan is required to conduct business within aquifer protection area.
	Zoning Regulations	Sec. 17 Aquifer Protection District • Prohibited uses: disposal, storage, or treatment of hazardous and solid waste material; road salt storage and loading areas; dry wells directly connected to any floor drain, wash basin, sink, or paved parking areas; outside storage of any materials which, in the opinion of the Planning and Zoning Commission, could contaminate ground water resources; filling stations; and cemeteries. • Specific requirements for underground storage of fuels.

4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT /GREEN INFRASTRUCTURE		
IMPERVIOUS COVER		
DESIGN REVIEW	Zoning Regulations	Sec. 9 Site Plan Review - No permits shall be issued until Planning and Zoning Commission has reviewed and approved design plans. - Commission will be considering traffic access, circulation and parking, landscaping and screening, illumination, character and appearance, and building visibility.
ALTERNATIVE DEVELOPMENT DESIGNS		
DENSITY BONUS		
MINIMUM BUILDABLE AREA	Zoning Regulations	Sec. 7A Lot and Building Requirements Minimum lot sizes by District are as follows in Square Feet: R-80 = 80,000; R-40 = 40,000; R-20/25 = 22,500; R-12/O = 12,000; R-HD/CB = 8,000; HOD = 1,306,800; B = 20,000; I-1 = 40,000; I-2 = 80,000.
UNBUILDABLE LAND	Zoning Regulations	Sec. 7A Lot and Building Requirements Specifies percentage for each District that lot coverage may not exceed.
MIXED LAND USE	Zoning Regulations	Sec. 10 Planned Unit Development - Mixed land use is permitted provided that uses are compatible with one another. Industrial uses cannot be mixed with commercial and residential uses. - No commercial facility may be within 200 feet of the boundary of the proposed development.
INTERIOR/REAR LOTS		
BOND REQUIREMENTS	Subdivision Regulations	Sec. 8 Bonding Requirement No permit for any work shall be issued until a bond is posted for work approved by the Town.

		- Bond estimate shall be prepared by the Town Engineer and approved by the Commission, which shall include a percentage not exceeding 20% to cover inflationary costs. - Written assurance may be accepted in lieu of a bond. - No bond shall be accepted for a period of less than 5 years and 3 months from the date of approval.
OPEN SPACE REQUIREMENTS	Zoning Regulations	Sec. 10 Planned Unit Development
FEES IN LIEU OF OPEN SPACE		Existing open space shall be maintained by an organization set up by the developer.
TRANSFER OF DEVELOPMENT RIGHTS		
PLANNED RESIDENTIAL DEVELOPMENT	Zoning Regulations	Sec. 10 Planned Unit Development - Can only be located in R-12 and B zones, and the property cannot be less than 75 acres of contiguous land. - Site plan must bind one person in developing the property. - Allows mixed commercial and residential uses, but not industrial uses.

WALLINGFORD

1. WATER QUALITY/WETLAND AND WATERCOURSE PROTECTION

Subcategory	Regulation Source	Summary
EROSION AND SEDIMENT CONTROL PLAN	Zoning Regulations	Sec. 6.18 Soil Erosion and Sediment Control - A soil plan is required with any application when the disturbed area is cumulatively more than one-half acre. - Single-family dwelling will be exempt. - Soil plan must control accelerated erosion and sedimentation based on the best available technology. - Plan must have but is not limited to a narrative, schedule, design criteria, installation and application procedures, and maintenance program for control measures. - Inspection will be made by Commission to ensure compliance with Connecticut General Statutes.
SLOPES	Zoning Regulations	Sec. 6.27 Slopes - Disturbed land shall be evenly graded to slopes not exceeding 1-foot vertical rise by 2 feet of horizontal distance. - The Planning and Zoning Commission may modify this requirement upon the recommendation of the Town Engineer.
STORMWATER MANAGEMENT	Zoning Regulations	Sec. 4.13 Watershed Protection District - Stormwater generated from the initial 0.5" to 1.0" of rainfall within confines of commercial or industrial development shall be collected and treated. - Sites shall properly divert initial runoff from appropriate areas to approved basins. Sec. 6.8 Open Space Subdivisions - Stormwater ponds or basins may be utilized and included as part of required open space. - Stormwater management plan must be thoroughly represented in the As-Built map.
UPLAND REVIEW AREAS		
VERNAL POOLS		

RIPARIAN BUFFERS		
FLOODPLAIN MANAGEMENT	Town Ordinances	Sec. 6.5 Floodplain Regulations • Flood hazard areas are identified by FEMA through the Flood Insurance Study and are available in the Planning Department. • Any proposed building structure located in Zones A or AE must conform to floodplain management provisions. • All structures shall be designed with low flood damage potential. • There shall be a minimum resistance to the flow of floodwaters. • Structures shall be anchored to prevent flotation. • Any utilities are prohibited at or below the base flood elevation. • Lowest floor including the basement shall be elevated at least two feet above highest adjacent grade if no depth number is specified. • The water holding capacity of a floodplain may not be reduced except if tidally influenced. • Prior to any construction in a flood hazard zone area, a Development Permit must be obtained from the Commission.
WATERSHED- LEVEL APPROACH IN REGULATIONS	Zoning Regulations	Sec. 4.13 Watershed Protection District • Overlay district that provides for additional conditions, standards and safeguards to permitted uses of underlying district in order to protect and maintain surface waters of Wallingford public water supply. • Includes restrictions on storm runoff (must be collected and treated), storage containers, and road salt application in parking lots.
PESTICIDE REDUCTION		
MUNICIPAL SEWER/WWTP FACILITIES		
ON-SITE SEPTIC SYSTEMS		

2. HISTORIC PRESERVATION, CULTURAL LANDSCAPES, BIODIVERSITY

Subcategory	Regulation Source	Summary
FOREST MANAGEMENT and TREE PRESERVATION	Subdivision Regulations	Sec. 6 - Commission may require planting of trees within the subdivision. - Trees shall generally be 50 feet apart on both sides and 15 feet from any street pavement, and shall avoid shading the southerly side of a dwelling. - Trees shall be planted with at least 1 ¾ DBH, a minimum height of 10 feet, and a mature height expected at least 35 feet.
HISTORIC PRESERVATION		
CULTURAL LANDSCAPES		
INVASIVE SPECIES CONTROL		

3. DRINKING WATER/AQUIFERS

Subcategory	Regulation Source	Summary
AQUIFER PROTECTION AREA DESIGNATION or AQUIFER PROTECTION ZONE REGULATION	Aquifer Protection Regulations	Sec. 3 Delineation of Aquifer Protection Area Boundaries The Planning and Zoning Agency of the Town of Wallingford shall delineate the aquifer protection areas on the Town of Wallingford zoning map. Such delineation shall consist of the combined areas of contribution and recharge areas as shown on Level A maps approved or prepared by the Commissioner.
LOCAL AQUIFER PROTECTION AGENCY	Town Ordinances	Ch. 3 Aquifer Protection Agency Planning and Zoning Commission is designated as Aquifer Protection Agency for Town of Wallingford.
AQUIFER PROTECTION REGULATIONS	Aquifer Protection Regulations	Outlines prohibited and regulated activities within Aquifer Protection Areas, as well as registration, permit, and bond and insurance requirements.

4. LAND USE

Subcategory	Regulation Source	Summary
LOW IMPACT DEVELOPMENT/ GREEN INFRASTRUCTURE	Zoning Regulations	Sec. 1.2 Purpose Encourages energy efficient patterns of development – solar and other renewable forms of energy are encouraged.
IMPERVIOUS COVER	Zoning Regulations	Sec. 6.3 Building on Unaccepted Streets Impervious cover may not direct water onto a property in a greater volume or concentration than was before
DESIGN REVIEW	Zoning Regulations	Art. VII – Site Plan and Special Permit Review - Site plan must be submitted for review for any permits to be issued. - Commission will review designs unless Commission Chairperson and Town Planner have waived necessity for Commission approval. - Site plan review will seek to ensure the plan coincides with the Town Plan. - Additional considerations may be public safety, traffic and pedestrian access, circulation and parking, landscaping and screening, lighting, public health, environmental features, drainage, and water quality.
ALTERNATIVE DEVELOPMENT DESIGNS		
DENSITY BONUS		
MINIMUM BUILDABLE AREA	Zoning Regulations	Sec. 5.1 Lot and Building Requirements Specifies minimum lot area for all residential districts as well as minimum frontage requirements.
UNBUILDABLE LAND	Zoning Regulations	Sec. 5.1 Lot and Building Requirements Specifies that building coverage may not exceed a certain percentage that varies based on District type.
INTERIOR/REAR LOTS	Zoning Regulations	Sec. 6.6 Rear Lots - Rear lots shall be connected by a strip of land or access way or otherwise approved by the Commission. - Each access way shall be at least 25 feet in width and the area of the access way shall not be included in the minimum required area of the lot. - Rear lots should only be in districts R-18, RU-40, RU-80, RU-120, RU-160.

MIXED LAND USE		
BOND REQUIREMENTS	Subdivision Regulations	Sec. IV(H) Bond • Applicant must post performance bond with Commission and Utilities Department in such amount as deemed sufficient to insure the satisfactory completion of all required improvements in accordance with the subdivision plan. • Total bond shall include an additional 15% to cover contingencies. • No lot shall be transferred to a buyer before any bond is posted, and any subdivision that is approved for development in phases must have separate bond for each phase. Sec. V. Completion of Work • Applicant can apply for reduction in bond by applying for partial release if a substantial amount of work has been completed. • Bond will only be released after inspection by the Town Engineer to determine if all conditions have been met and required site improvements have been made.
OPEN SPACE REQUIREMENTS	Zoning Regulations	Sec. 4.1 Residence Districts • Planned developments have a 50% open space requirement that can be met on a tract or subdivision basis. • No individual lot in a subdivision may have less than 30% open space. • There shall be a minimum open space distance of 50 feet between any non-residential structure or lot and a residential structure or lot.
FEES IN LIEU OF OPEN SPACE		
TRANSFER OF DEVELOPMENT RIGHTS		
PLANNED RESIDENTIAL DEVELOPMENT	Zoning Regulations	Sec. 4.1 Residence Districts • Planned Residential Developments require special permits. Sec. 4.3 Open Space Planned Residential (OSPRD) Districts • Allows one-family, two-family, and multi-family dwellings subject to certain conditions. • Specifies standards and requirements such as minimum parcel size, total number of units, etc.

