

## 7. STANDARDS

### 7.0 General

1. **Hours of Construction:** Outdoor construction shall only occur between the hours of 7am and 6pm Monday through Friday, unless explicitly allowed by the Commission.
2. **Electric Vehicle Charging Stations:** Each new construction of a commercial building or multi-unit residential building with thirty (30) or more designated parking spaces for cars or light duty trucks shall include electric vehicle charging infrastructure that is capable of supporting level two electric vehicle charging stations or direct current fast charging stations in at least ten percent (10%) of such parking spaces.

### 7.1 Parking and Loading Regulations

#### For General Commercial Zone (GC) and General Commercial + Residential Zone (GCR's) see Section 7.2

#### 7.1.A. General

1. *Except as may be otherwise provided in this Section 7.1, off-street parking and loading shall be provided in accordance with this Section for any building or use created, enlarged, or increased after the effective date of these Regulations.*
2. Parking and loading space shall be maintained and shall not be encroached upon so long as said principal building or use remains, *unless an equivalent number of spaces are provided elsewhere in conformance with these Regulations.*

The requirement for off-street parking space and off-street loading space shall be a continuing obligation of the owner of the real estate on which any structure or use is located as long as the structure or use is in existence and its use requires vehicle parking facilities. Required parking shall be assessed with any change in use.

3. It shall be a violation of these Regulations for:
  - a. An owner of any structure or use affected by this Section to discontinue, change, dispense with, or cause the discontinuance of any required vehicle parking or loading space;
  - b. Any firm or corporation to occupy a structure without providing parking and loading spaces, which meet the requirements of, and is in compliance with these Regulations.
4. Handicapped parking shall be provided in accordance with CGS Section 14-253a, the State of CT Building Code, and any other requirements.
5. Nothing in this Section shall be construed to prevent collective provision of off-street parking facilities for two or more structures or uses, provided that the total of such off-street parking spaces supplied collectively shall, unless modified by the Commission as provided in Section 7.1.C, be not less than the sum of the requirements for the various uses computed separately.

**7.1.B. Number of Parking Spaces**

Off-street parking spaces shall be provided for all new uses or buildings constructed, reconstructed, or enlarged after the effective date of these Regulations in accordance with the following schedule of requirements and any calculation resulting in a fraction shall be rounded to the nearest whole number.

<b>7.1.B Number of Parking Spaces</b> (See Section 7.2 for GC and GCR standards)	
<b>1. RESIDENTIAL USES</b>	<b>SPACES REQUIRED</b>
a. One-family dwellings	2 spaces per dwelling
b. Two-family dwellings	1 space for a studio or 1- bedroom dwelling; 2 spaces for a 2- or more bedroom dwelling
c. Multiple-family dwellings	1 space for a studio or 1- bedroom dwelling; 2 spaces for a 2- or more bedroom dwelling
d. Housing for elderly	0.75 spaces per dwelling unit
<b>2. INSTITUTIONAL USES</b>	<b>SPACES REQUIRED</b>
a. Places of assembly including, but not limited to places of worship, auditoriums, theaters, and stadiums	A maximum of 4.0 spaces per 1,000 square feet of gross floor area or As determined by the Commission based upon demonstration of need by the applicant
b. General hospital, convalescent, nursing or rest home	1 space per 4 patient beds plus 1 space per employee during the maximum work shift
<b>3. MARINE USES</b>	<b>SPACES REQUIRED</b>
a. Boat docks, marinas, and boatyards.	1 space per boat or mooring facility
b. Tour boat / Sport fishing boats	1 space for every 2 passengers the boat is licensed to carry
c. Passenger ferries	1 space for each 2 passengers the ferry is licensed to carry
<b>4. RETAIL / SERVICE USES</b>	<b>SPACES REQUIRED</b>

7.1.B Number of Parking Spaces (See Section 7.2 for GC and GCR standards)	
a. Appliance, carpet, furniture, electrical, heating, and plumbing retail sales	2.0 spaces per 1,000 square feet of gross floor area
b. Other retail sales and service establishments	4.0 spaces per 1,000 square feet of gross floor area
c. Open or outdoor businesses, including, but not limited to those which sell new and used: Motor vehicles, trailers, mobile homes, building supplies, machinery, equipment, swimming pools, nursery, and garden supplies	1 space per 1,000 square feet of lot area
d. Automotive services, including, but not limited to gas stations, auto dealers, auto accessories, auto repair, auto body and paint shop, muffler installations, tire shops, engine and transmission overhaul shops and car wash	4.0 spaces per 1,000 square feet of gross floor area; or 3 spaces per bay, lift or equivalent, whichever is greater. An attendant- operated or self-service car wash shall have at least 10 waiting positions for each bay between the street line and such bay for cars approaching and at least 2 waiting positions for cars leaving said bays
5. OFFICE USES	SPACES REQUIRED
a. General business and professional offices and financial institutions	4.0 spaces per 1,000 square feet of gross floor area; or 2 spaces for each office or tenant, whichever is greater  A drive-in bank window shall have at least 5 waiting positions between the street line and said window for cars approaching and at least 1 waiting position for cars leaving said window
6. HOSPITALITY USES	SPACES REQUIRED
a. Food and beverage establishments, including, but not limited to, restaurants, taverns, bars, luncheonettes, soda fountains, clubs (public and private), fraternal organizations and lodges	4.0 spaces per 1,000 square feet of gross floor area
b. Hotels, motels, and boarding, lodging, and rooming houses	1 space for each rooming unit, plus required parking for facilities used for eating, drinking, assembly, and other such uses

7.1.B Number of Parking Spaces (See Section 7.2 for GC and GCR standards)	
c. Bed and Breakfast Establishments	1 space per guest room, 2 spaces for the resident- owner, and 1 space per non-resident staff employee on each shift
7. INDUSTRIAL USES	SPACES REQUIRED
a. Manufacturing and industrial establishments	<p>1 space for each 3 employees on the maximum work shift provided that for uses with more than 100 employees, an official of the firm or institution shall submit a semi-annual affidavit (beginning within 30 days of the effective date of these Regulations) certifying the number of employees on each work shift.</p> <p>The parking requirements may be met in part by the provision of alternate transportation for employees in the following manner:</p> <ol style="list-style-type: none"> <li>1. Each three occupied seats in a van or bus shall be considered as one parking space.</li> <li>2. A bus that makes repeated trips from outlying areas outside City limits to the establishment before the start of the maximum work shift shall be counted once for each trip.</li> </ol>
b. Wholesale and distribution businesses, warehousing and storage businesses, truck terminals and other enclosed non-industrial storage uses	<p>1 space for each 1,000 square feet of gross floor area or 1 space for each three (3) employees on the maximum work shift, whichever is greater.</p> <p>For uses with more than 100 employees, an official of the firm or institution shall submit a semi-annual affidavit certifying the number of employees on each work shift. Reporting shall begin within 30 days of the effective date of these Regulations.</p>
8. OTHER USES	SPACES REQUIRED
a. Taxi services facility	1 space for each licensed cab plus 1 space for on-duty dispatcher. The Commission may allow for vehicles to be stacked
b. Group day care homes / Child day care	1 space per employee or staff person plus 1

7.1.B Number of Parking Spaces (See Section 7.2 for GC and GCR standards)	
center	space per every 7 children / persons (or fraction thereof) that the facility is licensed to serve
c. Specialized Classrooms	A minimum of 0.33 parking spaces for every student, instructor, and supporting staff member, provided, however, if the Planning and Zoning Commission determines that the proposed classes will generate a greater demand for parking than can be accommodated by this ratio, it can, as a condition of the Special Permit, require additional spaces, as needed.
d. Halfway Houses and Community Residential Counseling Facilities (CRCFs)	1 space for each staff member on maximum shift plus 1 space for each 3 adult residents. Additional parking spaces may be required by the Commission based upon the nature and use of the facility
e. Vocational Training Facilities	1 space per employee or staff member on maximum shift plus one space per every 5 clients served simultaneously based on the maximum number as stated in the application scope and services description. The Commission, based upon the nature and use of the facility, may require additional parking spaces.
f. Micro-brewery-distillery-winery	One space per 1,000 SF of production/ storage area along with other spaces as required for public floor area devoted to sales or consumption.
g. Mixed Use	The total required number of spaces for each use as listed herein. However, the Commission may allow a reduction under a shared parking scenario when uses have differing peak parking demands. When calculating the total number of spaces for mixed-use development under a shared parking scenario, readily available published data shall be used. This may include the Institute of Traffic Engineers, American Planning Association or Urban Land Institute. (See Section 7.1.C)

<b>7.1.B Number of Parking Spaces</b> (See Section 7.2 for GC and GCR standards)	
h. Accessory Uses	The Commission, or its designee, shall determine the minimum number of spaces required to support an accessory use based upon the accessory uses relationship to the principal use.
i. Uses not listed	The parking space requirements for a use not specifically listed in this Section shall be determined by the Commission based on parking demand generation for a listed use of similar characteristics.

**7.1.C Possible Modification of Parking Requirements**

1. **Permanent Parking Reduction For A Single Property-** The Commission may, by Special Permit, modify the cumulative parking requirements of Section 7.1B of these Regulations for a single property in the following situations:
  - a. Where in a mixed-use development on a single property, there are two or more land uses which have differences in their principal operating hours or dissimilarities in their clientele, thereby allowing utilization of the same parking spaces.
  - b. Where a use is located within 500 feet of another use, such as a church or other public place of assembly that is not in operation during the same hours or days as the first use, and where such church or public place of assembly is willing to make its parking available to the first use.
  - c. Where the Commission finds that existing on-street parking or on-street parking to be established by the applicant in the vicinity will alleviate the need to provide the full complement of parking on the site.
  
2. **Permanent Parking Reduction For Multiple Properties -** The Commission may, by Special Permit, modify the cumulative parking requirements of Section 7.1B of these Regulations for multiple properties where the Commission finds that a functional and interconnected parking arrangement is provided within and between the properties, that an agreement for joint access and parking, in perpetuity, acceptable to the Commission is filed on the land records, and further provided the Commission finds one or more of the following based on information provided by the applicant:
  - a. Peak parking demands among uses occur at different hours of the day and this offset results in a lower net peak parking demand;
  - b. Synergistic relationships between uses that allow patrons to park once while accessing multiple locations or allow for multiple purpose trips to occur within the development(s); or
  - c. The uses are likely to generate transit, bicycle or pedestrian trips and accommodations have been made to support these alternative forms of transportation.

3. **Permanent Compact Space Parking Reduction** - The Commission may, by Special Permit, permit parking spaces not less than 8 feet by 18 feet in cases where:
  - a. The parking spaces are for the exclusive use of employees,
  - b. All vehicles are parked by an attendant, or
  - c. The parking spaces are within a garage.
  
4. **Temporary Change of Use Exemption** - In the event that no new buildings or structures are being established and the land area, structures or permitted uses are simply being changed from one permitted use to another permitted use allowed under these Regulations, no additional parking spaces shall be required provided that:
  - a. The number of spaces that presently exist on the property is at least 90 percent of the cumulative parking requirement for the new use(s) and the other existing use(s) on the property, and
  - b. No “grandfathering” or other exception shall be provided relative to any future use of such premises.
  
5. **Temporary Parking Installation Reduction** - The Commission may, by Special Permit, waive the immediate installation of up to 25% of the required parking spaces where sufficient evidence has been presented, in the judgment of the Commission, to show that the reduced parking facilities will adequately serve the proposed use provided that:
  - a. The Special Permit shall be applicable only to the particular use or occupancy of land, buildings, or other structures specified in the application, and such Special Permit and Zoning/ Building Permit issued for the use shall become null and void in the event that such use or occupancy is changed to another use or occupancy.
  - b. Before the Commission waives the immediate installation of spaces, the applicant shall show upon the site development plan the complete layout for the full parking requirements and the design of the complete stormwater management system designed to handle the deferred parking pavement.
  - c. Upon approval by the Commission, the owner shall file the plan approved by the Commission in the Office of the Town Clerk, stipulating that:
    - The complete stormwater management system shall be installed at the time of initial development, and
    - The owner, or the successor and assigns of the owner, will install as many of the waived parking spaces as the Commission deems necessary within six months of the Commission's request, when, in the opinion of the Commission, such installation is needed.

**7.1.D. Location of Parking**

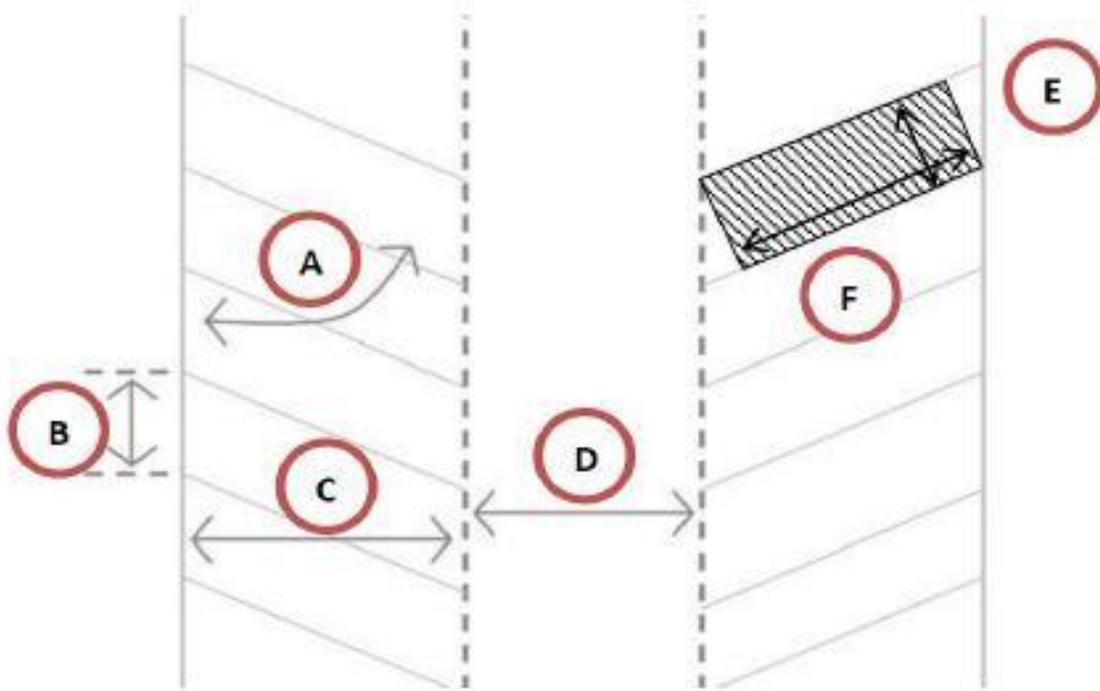
1. The parking spaces required for all residential dwellings shall be located on the same lot as the dwelling.
2. The parking spaces required for non-residential uses shall be located on the same lot as the principal use or on a lot which is within 500 feet of the principal use, such distance to be measured along the street lines to the property.
3. In industrial zones, if there are special and unusual circumstances that make it impractical to provide all required parking within 500 feet of the principal use, other provisions may be made for the location of parking provided parking is a permitted use in the zone in which it is to be located and subject to Special Permit approval and Site Plan approval by the Commission.
4. When required parking spaces are provided on land other than the lot occupied by the principal use for which they are required:
  - a. The land occupied by such spaces must be in the same possession as such principal use.
  - b. Such land must be bound by a covenant, recorded in the office of the Town Clerk binding such owner and his/her heirs and assigns to maintain the required number of parking spaces for the duration of the use served.

**7.1.E. Size of Spaces**

1. Off-street parking space shall be 9 feet in width by 20 feet in length *except that the Commission may, by Special Permit, allow the following parking space configuration where the location and distribution of spaces and overall circulation is appropriate:*
  - a. At least 60 percent of the spaces shall be 9 feet in width by 18 feet in length;
  - b. Up to 20 percent of the spaces may be 8 feet in width by 16 feet in length and be marked as “compact spaces”; and
  - c. Up to 20 percent of the spaces shall be 10 feet in width by 20 feet in length and be marked as “oversized spaces.”
2. An off-street loading space, as used herein, shall be a space of not less than 12 feet in width, 40 feet in length, and 14 feet in height.

7.1.F. Parking Area Dimensions

Table 7.1.F Parking Area Dimensions					
A. Parking Angle	0°	30°	45°	60°	90°
B. Curb Length	22'-0"	16'-6"	12'-9"	10'-5"	9'-0"
C. Stall Depth	8'	18'	19'	19'	18'
D. Driveway Width – one way	12'	11'	13'	18'	20'
– two-way	20'	20'	20'	22'	24'
E. Parking Space Width	8'	9'	9'	9'	9'
F. Parking Space Length	22'	18'	18'	18'	18'



**7.1.G. General Layout Requirements**

1. No parking lot is to be located in any required frontyard setback.
2. Legal on-street parking spaces, as determined by the Groton Traffic Authority or its agent, State Traffic Commission or the Connecticut Department of Transportation corresponding to the lot frontage, (both frontages in the case of corner lots). No spaces within 25 feet of a bus stop or a street corner or within 10 feet of a fire hydrant may be counted.<sup>1</sup>
3. The general layout and traffic circulation of parking and loading areas shall be designed so as to avoid unsafe conditions and traffic congestion in the streets upon which the area has access and to provide for the safety and adequacy of access for vehicles and pedestrians using the area.
4. All proposed curb cuts and access drives shall comply with all applicable requirements of:
  - a. The State Department of Transportation when accessing a State highway, and
  - b. The City's Highway Department when accessing a City street.
5. Any enclosed loading spaces shall be located at least 30 feet from any street line, and any open loading space shall be so designed that trucks when loading or unloading will not project over any street line.
6. Individual parking and loading spaces, maneuvering areas, entrances and exits shall be suitably identified with lines and arrows, as deemed necessary by the City Planner.
7. No access drive, aisle or maneuvering area shall have a turning radius of less than 20 feet.
8. Where vehicles will be located adjacent to sidewalks, fences, walls, required buffer strips, trees, landscaping, or similar constructions, a suitable bumper or curb shall be provided in such a location that the vehicle cannot overhang or otherwise damage said area.

**7.1.H. Loading Spaces**

1. Every hospital, institution, hotel, retail store, office building, wholesale house, warehouse or industrial building, or additions thereto to which or from which outside deliveries of materials or dispatches of materials are to be made by motor vehicles and totaling 8,000 square feet or more in floor area constructed, reconstructed or enlarged after the effective date of these Regulations shall have on the lot one permanently maintained loading space and one additional loading space for each additional 16,000 square feet of floor area or major portion thereof, excluding basements.

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<sup>1</sup> Note: "Legal" on-street parking spaces must:

1. Be at least 25 feet from any intersection of two or more streets;
2. Allow for fifty feet of space at bus stops so that buses can pull to the curb;
3. Avoid blocking the visibility of drivers exiting driveways;
4. Be at least 25 feet long.

2. When such calculation results in the requirement of a fractional space, any fraction up to and including one-half shall be disregarded and fractions over one-half shall require an additional loading space.

**7.1.I. Truck/Trailer Parking**

No tractor, trailer, tractor-trailer combination or any truck loaded with merchandise shall be parked or stored on a lot for a period exceeding seven consecutive days in one calendar month, *except in an industrially zoned district.*

**7.1.J. Surface/ Lighting/ Landscaping Requirements**

1. Off-street parking and loading areas, including driveways, shall include an all-weather surface to the satisfaction of the Planning and Zoning Commission, or the Zoning Official in cases where the Zoning Official has final authority.
2. Such all-weather surface shall be stable, durable, dustless and graded and drained as to dispose of all surface water accumulation in the area.
3. Where the proposed grade exceeds 10%, all such areas and driveways shall be paved in those areas.
4. Any lighting used shall be in accordance with Section 7.6 and shall be shielded and so arranged as to direct the light away from adjoining premises and public rights-of-way.
5. All parking areas shall be landscaped in accordance with the requirements below:
  - a. *Except in the Industrial/ Technology (IT) or Technology Campus (TC) zones*, not more than twelve (12) at-grade parking spaces shall be permitted in a continuous row, and not more than twenty-four (24) spaces shall be permitted in a single parking area without being interrupted by landscaping.
  - b. All parking areas with more than 5 spaces that abut or are across the street from, the boundary of, or any property within any Residential Zone shall be bordered on all sides with a 10-foot-wide buffer strip.
  - c. All loading areas that abut or are across the street from, the boundary of, or any property within any Residential Zone shall be bordered on all sides with a 10-foot-wide buffer strip.
  - d. A planting area with a minimum width of three (3) feet shall be provided between the parking area and the required setback line on any parcel, *except in the Industrial/ Technology (IT) or Technology Campus (TC) zones, where:*
    - *A Site Plan approval or Special Permit is required, and*
    - *The parking area faces a street or property line.*
  - e. Buffer strip(s) shall be located and maintained according to the landscaping and fencing approved by the Commission. They shall be of suitable type, density, and height to effectively screen parking area(s) and the lights from motor vehicles adjacent to residential areas.

**7.2. Parking & Loading Regulations for General Commercial Zones (GC) and All General Commercial + Residential Zones (GCR's)**

**7.2.A. General**

1. *Except as may be otherwise provided in this Section 7.1, off-street parking and loading shall be provided in accordance with this Section for any building or use created, enlarged, or increased after the effective date of these Regulations.*
2. Parking and loading space shall be maintained and shall not be encroached upon so long as said principal building or use remains, unless an equivalent number of such spaces are provided elsewhere in conformance with these Regulations.
3. The requirement for off-street parking space and off-street loading space shall be a continuing obligation of the owner of the real estate on which any such structure or use is located if the structure or use is in existence and its use requiring vehicle parking facilities continues unless a change in use also changes the parking requirements.
4. It shall be unlawful for:
  - a. An owner of any structure or use affected by this Section to discontinue, change, or dispense with, or to cause the discontinuance of any required vehicle parking or loading space.
  - b. Any firm or corporation to occupy a structure without providing parking and loading spaces, which meet with the requirements of and is in compliance with this these Regulations.
5. Handicapped parking shall be provided in accordance with CGS [Section 14-253a](#) and any other requirements of State law.
6. Nothing in this Section shall be construed to prevent collective provision of off-street parking facilities for two or more structures or uses, provided that the total of such off-street parking spaces supplied collectively shall, unless modified by the Commission as provided in Section 7.1.C, be not less than the sum of the requirements for the various uses computed separately.

**7.2.B Parking and Loading Requirements**

**1. Surfacing and Drainage**

All parking and loading areas shall be properly surfaced, graded and drained. Stormwater drainage systems shall be designed to minimize run-off and maximize absorption of pollutants by the soil. Required parking and loading facilities for all uses, other than one- and two-family dwellings, shall have an all-weather, dust-free surfacing or bituminous or concrete paving, and shall be maintained in good condition and capable of allowing free and safe movement of all vehicles using the facilities.

*Any parking spaces in excess of the minimum required shall be pervious unless expressly stated*

*otherwise by the Commission.*

**2. Number of Parking Spaces**

Off-street parking spaces shall be provided for all new uses or buildings constructed, reconstructed, or enlarged after the effective date of these Regulations in accordance with the following schedule of requirements and any calculation resulting in a fraction shall be rounded to the nearest whole number:

7.2.B Number of Parking Spaces Required (For GC and GCR Zones)		
USES	FUNCTION	SPACES REQUIRED
<b>1. RESIDENTIAL<sup>2</sup></b>		
a. One-family dwellings	RESIDENTIAL	1 space per dwelling
b. Two-family dwellings	RESIDENTIAL	1 space per dwelling
c. Multiple-family dwellings	RESIDENTIAL	1 space for a studio or 1- bedroom dwelling.  2 spaces for a 2- or more bedroom dwelling
d. Housing for elderly	RESIDENTIAL	0.75 paces per dwelling unit
<b>2. INSTITUTIONAL</b>		
a. Places of assembly, including, but not limited to yes, auditoriums, theaters, and stadiums	CIVIC	1 space for each 4 fixed seats or equivalent gross floor area

<sup>2</sup> Stacked parking for Single-Family, ADU and Duplex residences allowed by-right.

7.2.B Number of Parking Spaces Required (For GC and GCR Zones)		
USES	FUNCTION	SPACES REQUIRED
b. General hospital, convalescent, nursing or rest home	CIVIC	1 space per 4 patient beds plus 1 space per employee during the maximum work shift
<b>3. MARINE</b>		
a. Boat docks, marinas, and boatyards.	OTHER	1 space per boat or mooring facility
b. Tour boat / Sport fishing boats / passenger ferries	OTHER	1 space for every 2 passengers the boat is licensed to carry
<b>4. RETAIL / SERVICE</b>		
a. Other retail sales and service establishments	RETAIL	2.0 to 4.0 spaces per 1,000 square feet of gross floor area
<b>5. OFFICE</b>		
a. General business, professional and medical offices including financial institutions	OFFICE	3.0 spaces per 1,000 square feet of gross floor area.  A drive-in bank window shall have at least 5 queue positions
<b>6. FOOD SERVICE</b>		
a. Take-out food service and catering facilities	RETAIL	4 spaces per 1,000 square feet of gross floor area

7.2.B Number of Parking Spaces Required (For GC and GCR Zones)		
USES	FUNCTION	SPACES REQUIRED
b. Restaurant, Bars, fraternal organizations and lodges	RETAIL	4 spaces per 1,000 sf of patron floor area
<b>7. HOSPITALITY + LODGING<sup>3</sup></b>		
a. Hotels, motels, rooming and boarding houses	LODGING	1 space for each rooming unit, plus required parking for facilities used for eating, drinking, assembly.
b. Bed and Breakfast Establishments	LODGING	1 space per guest room, 2 spaces for the resident- owner, and 1 space per non-resident staff employee on each shift.
<b>8. MANUFACTURING</b>		
a. Primary and Accessory Use: Manufacturing establishments	OTHER	1 space for each 3 employees on the maximum work shift.
<b>9. OTHER</b>		
a. Taxi services facility	OTHER	1 space for each licensed cab plus 1 space for on-duty dispatcher. The Commission may allow for vehicles to be stacked.
b. Group Day Care Homes / Child Day Care Center / Adult Day Care	OTHER	1 space per staff person on largest shift plus 1 space per every 7 people that the facility is licensed to serve. Drop-off and pick-up space may be stacked, and must be sufficient per the Commission

<sup>3</sup> Parking for uses open to the public such as restaurant or bar shall be determined using the Shared Parking Factor.

7.2.B Number of Parking Spaces Required (For GC and GCR Zones)		
USES	FUNCTION	SPACES REQUIRED
c. Specialized Classrooms	OTHER	A minimum of 0.33 parking spaces for every student, instructor, and supporting staff member, provided, however, if the Commission determines that the proposed classes will generate a greater demand for parking than can be accommodated by this ratio, it can, as a condition of a Special Permit, require additional spaces.
d. Halfway Houses and Community Residential Counseling Facilities (CRCFs)	OTHER	1 space for each staff member on maximum shift plus 1 space for each 3 adult residents. Additional parking spaces may be required by the Commission based upon the nature and use of the facility.
e. Vocational Training Facilities	OTHER	1 space per employee or staff member on maximum shift plus one space per every 5 clients served simultaneously based on the maximum number approved in permit. The Commission, based upon the use of the facility, may require additional parking spaces.
f. Micro-brewery-distillery/winery	OTHER	One space per person on largest shift. Uses in addition to manufacturing may be computed based upon the Shared Parking Factor or per the Commission as deemed necessary and reasonable.
g. Mixed Use	OTHER, unless a combination of RETAIL, OFFICE, RESIDENTIAL	Parking for mixed uses shall be determined using the Shared Parking Factor. <sup>4</sup> (See Section 7.2.C)

<sup>4</sup> If the Shared Parking Factor in these Regulations do not satisfy the need for required parking per the applicant or the Commission, data from the Institute of Traffic Engineers, American Planning Association or Urban Land Institute or a professional transportation engineer, licensed in the

7.2.B Number of Parking Spaces Required (For GC and GCR Zones)		
USES	FUNCTION	SPACES REQUIRED
	and/or CIVIC	
h. Accessory Uses	OTHER, unless a combination of RETAIL, OFFICE, RESIDENTIAL and/or CIVIC	The Commission, or its designee, shall determine the minimum number of spaces required to support an accessory use based upon the accessory uses relationship to the principal use.
i. Uses not listed	OTHER, unless a combination of RETAIL, OFFICE, RESIDENTIAL and/or CIVIC	The parking space requirements for a use not specifically listed in this Section shall be determined by the Commission based on parking demand generation for a listed use of similar characteristics.

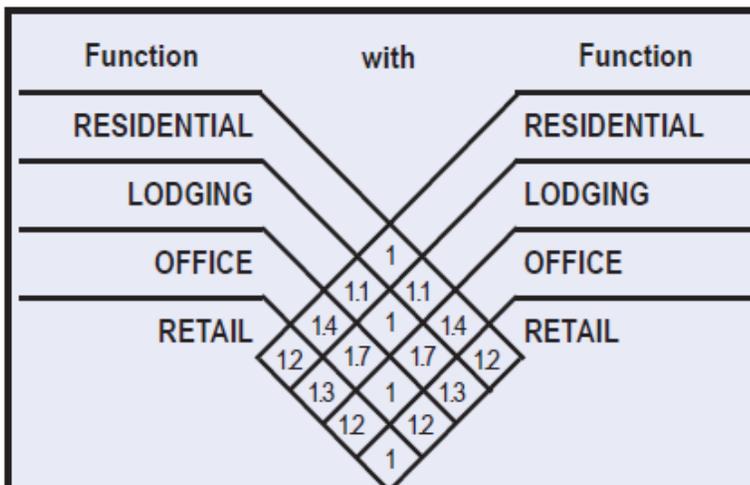
State of CT, shall be the next professional resource consulted.

7.2.C Parking Calculations for Shared Parking Conditions

The Shared Parking Factor for two land use functions, when divided into the sum of the two amounts listed on the Required Parking Table 7.2.B produce the Effective Parking needed for each site involved in shared parking. Conversely, if the Shared Factor results in the amount of building square footage allowed on each site given the parking availability when used as a multiplier. [See Example Below]

Residential	1.0 per studio / 1 BR dwelling
	2.0 per studio / 2 or more BR dwelling
Lodging	1.0 per Rooming Unit
Office	2.0 / 1,000 sf
Retail, Food & Beverage	3.0 / 1,000 sf
Civic	To be determined by the Commission
Other	To be determined by the Commission

SHARED PARKING FACTOR<sup>5</sup>



**Shared Parking Factor:**  
When three functions share parking, the lowest Shared Parking Factor shall be used to assure enough parking.

If the Shared Parking Factor in these Regulations do not satisfy the need for required parking per the applicant or the Commission, data from the Institute of Traffic Engineers, American Planning Association or Urban Land Institute or a professional transportation engineer, licensed in the State of CT, shall be the next professional resource consulted.

<sup>5</sup> Food & Beverage Functions calculated as Retail

**EXAMPLE 1: GC and GCR Zones**  
**Mixed-Use building:**  
**12,000 sf of office**  
**75 dwelling units (45 - 1 BR; 30 - 2+ BR)**

**Office:**  
 15,000 sf x 2 required spaces / 1,000 sf = 30 spaces

**Residential:**  
 45 1BR du's x 1 required space / du = 45 spaces  
 30 2+BR du's x 2 required spaces / du = 60 spaces  
 = 105 spaces

Total required *before* applying sharing factor  
 30 spaces + 105 spaces = 135 spaces

**135 required spaces / 1.4 sharing factor = 96 actual spaces required**

Bicycle Parking Stalls:  
 96 parking spaces x 1 stall / 10 spaces (round per standard convention)  
**TOTAL = 9 bicycle stalls**

**EXAMPLE 2: GC and GCR Zones**  
**Mixed-use building:**  
**10,000 sf of office**  
**20 dwelling units (6 studio; 5 - 1 BR; 9 - 2+ BR)**

**Office:**  
 10,000 sf x 2 required spaces / 1,000 sf = 20 spaces

**Residential:**  
 6 studio du's x 1 required space / du = 6 spaces  
 5 1BR du's x 1 required space / du = 5 spaces  
 9 -2+BR du's x 2 required spaces / du = 18 spaces  
 = 29 spaces

Total required *before* applying sharing factor  
 20 spaces + 29 spaces = 49 spaces

**49 required spaces / 1.4 sharing factor = 35 actual spaces required**

Bicycle Parking Stalls:  
 35 parking spaces x 1 stall / 10 spaces (round per standard convention)  
**TOTAL = 4 bicycle stalls**

7.2.D. Parking Location and Private Roadway Standards

Table 7.2.D Private Roadway Summary for Desired Design Speed

Table 7.2.D Private Roadway Summary for Desired Design Speed			
Design Speed	Travel Lane Width	Local	Arterial
Below 20 mph	8 feet	•	•
20-25 mph	9 feet	•	•
25-35 mph	10 feet	•	•
25-35 mph	11 feet	•	•
Above 35 mph	12 feet	•	•
Design Speed	Parking Lane Width	Local	Arterial
20-25 mph	(Angle) 18 feet	•	•
20-25 mph	(Parallel) 7 feet	•	na
25-35 mph	(Parallel) 8 feet	•	•
Above 35 mph	(Parallel) 9 feet	na	•
Design Speed	Effective Turning Radius	Local	Arterial
Below 20 mph	5-10 feet	na	•
20-25 mph	10-15 feet	•	•
25-35 mph	15-20 feet	•	•
Above 35 mph	20-30 feet	•	•

• Allowed

1. Automobile Parking and Driveways:
  - a. Surface parking lots shall be masked from the frontage by a building or streetscreen.
  - b. Surface parking lots shall be located behind the frontyard setback *plus 20 feet*.
  - c. Driveways, drop-offs and unpaved parking areas may be located within the frontyard setback and shall be limited to five spaces. These spaces may be used for temporary parking only.
  - d. Garages shall be located behind the frontyard setback plus 20 feet, unless attached to a single-family dwelling.
  - e. Driveways at frontages of single- or two-family dwellings shall be no wider than 12 feet within the frontyard setback.
  - f. Driveways at frontages of mixed-use, multi-family and/or non-residential uses shall be no wider than 18 feet within the frontyard setback.

2. Bicycle Parking:

A minimum of one bicycle stall shall be provided for every ten actual vehicular parking spaces.

3. Private Roadway Standards

Private roadways shall be established to:

- a. A design speed of up to 20-25 mph, and
- b. Shall not have one-way travel lane width that exceeds 9'-0',
- c. Shall not have a two-way travel lane width that exceeds 18'-0" with a 1'-0" buffer on each side,
- d. Nor have an effective turning radius of more than 10 feet.

4. Driveway Aisle Widths

- a. One-way aisles shall not exceed 9'-0"
- b. Two-way aisles shall not exceed 18'-0"

**7.2.E. Location of Parking**

- 1. The parking spaces required for all residential dwellings shall be located on the same lot as the dwelling.
- 2. The parking spaces required for non-residential uses shall be located on the same lot as the principal use or, on a lot within 500 feet of the principal use. Such distance to be measured along the street lines to the property. The land occupied for non-residential parking spaces must be in the same ownership as the principal use.
- 3. Land used for off-site parking must be bound by a covenant, recorded in the office of the Town Clerk binding such owner and his/her heirs and assigns to maintain the required number of parking spaces for the duration of the use served.
- 4. Parking lots shall not have prominent frontage along the public street, *except for entrances and driveways to such parking lots.*
- 5. Surface parking lots shall be masked from the frontage by a building or a streetscreen.

6. Parking required for multi-family or mixed-use functions may be in a parking structure located below grade or, a minimum of 20 feet behind the frontyard setback.

### 7.2.F Parking Space Size and Configuration

1. Parking space size and configuration where appropriate shall allow:
  - a. At least 60% of the spaces shall be 9 feet in width by 18 feet in length.
  - b. Up to 20% of the spaces may be 8 feet in width by 16 feet in length and be marked as "compact spaces"; and
  - c. Up to 20% of the spaces may be 10 feet in width by 20 feet in length and be marked as "oversized spaces."
2. An off-street loading space may not be less than 12 feet in width, 40 feet in length, and 14 feet in height.

### 7.2.G. Parking Area Dimensions

#### Parking on Private Roadways

Parallel parking on private roadways should be established to:

1. A design speed of up to 20-25 mph, and
2. Shall have a parking width of not more than 8 feet for parallel parking, and
3. Shall have a stall depth of no more than 18 feet for parallel parking.

### 7.2.H. General Layout Requirements

1. No parking lot shall be located in any required front setback, except that the Commission may, by Special Permit, allow parking within the first layer for drop-off and pick-up, and handicapped parking.
2. The general layout and traffic circulation of parking and loading areas shall be designed to avoid unsafe conditions and traffic congestion in the streets upon which the area has access and to provide for the safety and adequacy of access for vehicles and pedestrians using the area.

3. All proposed curb cuts and access drives shall comply with all applicable requirements of:
  - a. The State Department of Transportation when accessing a state highway, and
  - b. The City's Highway Department when accessing a city street.
4. Any enclosed loading spaces shall be located at least 30 feet from any street line, and any open loading space shall be so designed that trucks when loading or unloading will not project over any street line.
5. Individual parking and loading spaces, maneuvering areas, entrances and exits shall be suitably identified with lines and arrows, as deemed necessary by the City Planner.
6. No access drive, aisle or maneuvering area shall have a turning radius of less than 20 feet.
7. Where vehicles will be located adjacent to sidewalks, fences, walls, required buffer strips, trees, landscaping, or similar constructions, a suitable bumper or curb shall be provided in such a location that the vehicle cannot overhang or otherwise damage said area.

### **7.2.I. Loading Spaces**

#### Required Truck-Loading Spaces

Truck-loading spaces shall be adequate in number to serve the proposed use and shall be located on the site so as not to impede on-site pedestrian and vehicular circulation. Unless explicitly allowed by the Planning and Zoning Commission, all loading zones shall be located in the third layer.<sup>6</sup>

### **7.2.J. Truck/Trailer Parking**

No tractor-trailer, or part thereof, containing merchandise shall park or be stored on a lot in a GCR zone for more than seven consecutive days in one 30-day period.

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<sup>6</sup> A range of depth of a Lot within which certain elements are permitted (See bulk regulations and definitions for specific metrics).

**7.3. Surface / Landscaping Requirements for GC and GCR ONLY**

1. Off-street parking and loading areas, including driveways, shall include an all-weather surface to the satisfaction of the Planning and Zoning Commission, or the Zoning Official in cases where the Zoning Official has final authority.
2. Such all-weather surface shall be stable, durable, dustless and graded and drained as to dispose of all surface water accumulation in the area.
3. Where the proposed grade exceeds 10%, all such areas and driveways shall be paved in those areas.
4. Any exterior lighting used shall be in accordance with *Section 7.8* and shall be shielded and so arranged as to direct the light away from adjoining premises and public rights-of-way.
5. All parking areas shall be landscaped in accordance with the requirements below:
  - a. All parking areas with more than 5 spaces that abut or are across the street from, any Residential Zone shall be bordered on all sides with a 10-foot-wide buffer strip.
  - b. All loading areas that abut or are across the street from, any Residential Zone shall be bordered on all sides with a 10-foot-wide buffer strip.
  - c. A planting area with a minimum width of three (3) feet shall be provided between the parking area and the required setback line on any parcel in a GCR zone.
  - d. Buffer strip(s) shall be approved by the Commission or City Planner and located and maintained with appropriate landscaping and fencing
  - e. Landscaping of buffer strip(s) shall be approved by the Planning and Zoning Commission and/or the City Planner. Buffer strips shall incorporate street-screen(s)<sup>7</sup> that are of suitable plant materials in species, height, and density and/or hardscape to effectively screen parking area(s) and headlights from motor vehicles onto adjacent residential parcels.

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<sup>7</sup> Street-Screen: A freestanding wall built along the Frontage Line, or coplanar with the Facade. It may mask a parking lot from the Thoroughfare, provide privacy to a side-yard, and/or strengthen the spatial definition of the public realm.

## 7.4. Sign Regulations

### 7.4.A. Purpose

It is the intention of these sign regulations to promote the public safety, protect property values, create an attractive business climate and enhance the physical appearance of the community.

### 7.4.B. General Requirements

No sign, *except as provided in Section 7.4.C and Section 7.4.H, hereof*, shall be erected or structurally altered unless an application for a Sign Permit has been approved by the Zoning Official.

### 7.4.C. Signs Permitted in All Zones

The following signs are permitted in all zones provided they meet the requirements of Section 7.4.1 and Section 7.4.J:

1. One non-illuminating identification sign not to exceed 2 square feet in area or 8 feet in height, stating the name and address of the occupant. Home occupations on file with the Zoning Official may also state the occupation or profession on the sign.
2. A marker not to exceed 2 square feet identifying a historic building.
3. A sign erected by the City, State, or Federal Government.
4. A sign erected by a public carrier for direct information concerning its service at the location.
5. A sign erected by any fraternal, civic, religious or service organization or club, merely announcing its presence in the City of Groton and the time and place of its regular meeting, provided such sign shall not exceed 3 feet in diameter nor 9 square feet in area.
6. Any flag, badge, insignia or device or any governmental agency or civic, charitable, religious, patriotic, political, fraternal, or similar non-profit organization when displayed along a line of march of any parade, or in sockets along any street during a fundraising drive.
7. Temporary political signs displayed during election campaigns provided no sign shall exceed 4 square feet in a Residential zone or 24 square feet in a business or industrial zone.

8. A temporary construction sign is permitted in any zone subject to approval of a sign permit and provided the sign is non-illuminated, does not exceed 32 square feet in area, identifies an engineer, architect, and/or contractor engaged in development of land or construction or alteration of buildings and further, provided such sign is set back at least 10 feet from any street line and is removed upon completion of construction.

9. One temporary, non-illuminated real estate sign identifying the lease or sale of a building and/or lot provided such sign is removed within 35 days after the sale or lease of said building and/or lot and further provided the area of said sign shall not exceed the following:

Use/ Zone	Sign Area Allowed
One- or two-family dwelling	4 square feet
Any other use permitted in a residential zone including the WBR Zone	24 square feet
Any use permitted in the General Commercial, Industrial/ Technology, or Technology Campus Zone.	32 square feet for each 25 feet the sign is set back from the street line, however, no sign shall exceed 300 square feet.

**7.4.D. Signs Permitted in Residential Zones**

The following signs are permitted in all Residential Zones, including the R-12 and WBR Zones.

1. One identification sign for each separate street line of an approved Special Permit Use subject to the following standards:
  - a. The square foot area of such sign shall not be greater than one-half the linear foot distance it is located from any lot line and, in any case, shall not exceed 9 square feet in area;
  - b. The height of such sign shall not be greater than the distance it is located from any lot line and, in any case, shall not exceed 8 feet in height;
  - c. The sign shall only be non-illuminated or indirectly illuminated;
  - d. The sign shall comply with the applicable side and rear yard setback requirements for principal buildings; and
  - e. The sign shall be set back a minimum of 50% of the applicable frontyard setback requirement for principal buildings.
2. Other signs shall be limited to directional signs necessary for public safety or convenience.

3. In the WBR Zone, only one projecting sign is permitted for each use on the street front floor with the following restrictions:
  - a. No sign shall exceed 2 feet in any dimension.
  - b. A 10-foot clearance over the existing grade or walk must be maintained.
  - c. The projecting sign area shall be included in the total sign area for wall signs.

#### **7.4.E. Signs Permitted in Non-Residential Zones**

The following signs are permitted in the General Commercial, Industrial/ Technology, and Technology Campus Zones and for non-residential uses in the Waterfront Business Residential Zone.

1. The aggregate area of all signs on the premises shall not exceed five percent (5%) of the gross floor area of all buildings on the lot.
2. Illuminated identification signs shall be permitted for each separate street line.
  - a. **Ground Signs** -
    - i. There shall be only one ground sign along any street line for each separate use on the premises.
    - ii. The total sign area along each street line may be increased by an area to setback ratio of (2:1) 2 square feet of sign area for each linear foot of yard setback as measured from a street or lot line, provided that the minimum required setback from any street or lot line shall be 10 feet. The sign height may be increased up to the maximum permitted height in the applicable zone by a height to setback ratio of (1:1) 1 foot in sign height for each linear foot of yard setback as measured from a street or lot line, provided that the minimum required setback from any street or lot line shall be 10 feet.
  - b. **Wall Signs** - There shall be only one sign on any street facade for each separate use of the building. The total sign area on each street facade shall not exceed 20% of the gross area of said wall. The Commission may, as deemed necessary, appropriate or desirable in its judgment, permit additional wall signs, in the same manner as above on a building wall which faces and adjoins a significant and substantial accessory off-street parking structure, lot or area.
  - c. **Projecting Signs** - One projecting sign on any street facade may be permitted for each separate use of the building, provided that the sign area is included as part of the total sign area for wall signs. Said projecting sign shall extend under a roof and over a walkway and shall not exceed 4 feet in any dimension.
  - d. **Identification Signs** - No identification signs shall be permitted in any required side or rear yard setback adjoining a Residential District.
3. Other signs necessary for and exclusively limited to directional or safety purposes shall be allowed.

4. No trailer-mounted signs shall be permitted, unless they meet all setback, height, and size requirements of ground signs, and a permit is issued for same by the Zoning Official.

#### **7.4.F. Commercial Advertising Signs in Non-Residential Zones**

Indirectly illuminated commercial advertising signs are permitted in the General Commercial, Industrial/Technology, and Technology Campus Zones subject to Special Permit approval and Site Plan approval and the following conditions:

1. Not more than one commercial advertising sign shall be permitted on a lot and the sign area of such sign shall not exceed a length of 48 feet nor a vertical dimension of 14 feet. All such commercial advertising signs shall be ground signs.
2. Such signs shall be located only where the applicable zone extends at least 250 feet in all directions from the proposed sign and shall not be placed closer than 750 feet apart, measured along the centerline of the street to any other such sign.
3. Such signs shall comply with all yard setback requirements for principal building in the applicable zone, but in no case shall such yard setback be less than 20 feet from any lot line.
4. The maximum height of the structure shall not exceed the maximum height for principal buildings in the applicable zone, nor shall it exceed a height of 40 feet above the ground level nor 24 feet above the curb level of the street to which it is oriented.
5. When such signs are visible from the main traveled way of a limited access highway and are located within 500 feet of such highway, they shall not be placed closer than 3,500 feet apart measured along the centerline of such highway to any other such sign.
6. When pre-existing commercial advertising signs exist, the owner may apply to the Planning and Zoning Commission to remove and relocate such sign with a new commercial advertising sign of equivalent size which conforms to this Section in all respects; *except that the Commission may allow such relocation 50% closer to other commercial signs than otherwise required.*

#### **7.4.G. Prohibited Signs**

The prohibitions contained in this Section shall apply to all signs, all artificial lighting and all zones, regardless of designation, within the City of Groton.

1. Off -premises advertising signs or billboards are not permitted.
2. No sign or advertising device shall be erected, used or maintained which in any way simulates official directional or warning signs erected or maintained by the Federal, State or City Governments for the protection of the public health and safety.
3. No sign or advertising device shall be erected or maintained in such a manner as to obstruct or interfere with the free and clear vision on any street, driveway or navigable channel.

4. No sign or advertising device shall be erected or maintained with any lighting control mechanism which may cause radio or television interference.
5. No illuminated sign or lighting device shall be placed or directed on any property in a manner that would permit the light beams and illumination therefrom to be directed or beamed onto a public street or walkway, or onto adjoining properties so as to cause glare or reflection that might constitute a traffic hazard or public nuisance.
6. No animated sign or advertising device shall be erected.
7. No flashing sign or advertising device which creates intermittent, or varying light intensity shall be erected.
8. No projecting sign shall extend more than 15 inches beyond the building walls or parts thereof, *except as otherwise provided in these sign regulations.*
9. No roof sign shall be erected.
10. No building or part thereof, such as a gable, roof, or wall, shall be outlined by direct illumination for the purpose of commercial advertising.
11. No sign shall be attached to or be erected or maintained in such a manner as to obstruct any fire escape, window, door, or other building opening used for egress and ingress, ventilation or other firefighting purpose.
12. No commercial advertising sign shall be allowed, *except as otherwise provided in Section 7.4.F hereof.*
13. No signs shall be painted directly on any roof, wall or pole. Signs shall be distinguished from public art.

**7.4.H. Exempt Signs**

Banners suspended overhead from municipally owned poles along city streets, sponsored, in part or solely by the City of Groton and/or Groton Utilities.

**7.4.1 Maintenance**

1. All signs, together with their supports, braces, guys, and anchors, shall be kept in good repair and in safe condition. The owner of the premises in which a sign is erected shall be directly responsible for keeping such sign and premises around it in a safe, sanitary, neat, and clean condition.
2. Any sign, now or hereafter existing, which no longer identifies or advertises a bona fide business conducted, product sold, or activity or campaign being conducted shall be taken down and removed by the owner, agent, or person having beneficial use of the building, structure, or lot upon which the sign is located within sixty-five days of such cessation.

**7.4.J. Illumination**

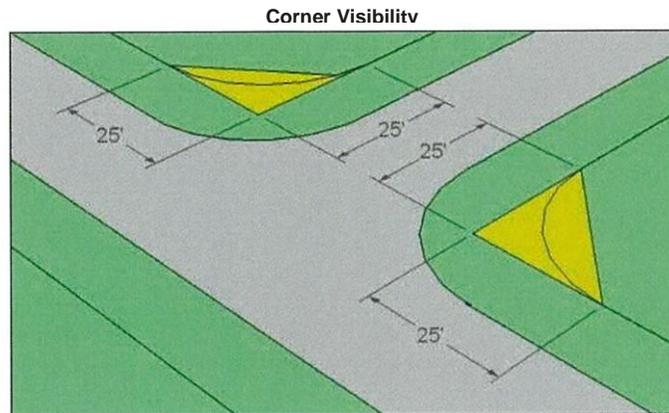
Any illuminated sign or lighting device shall employ only lights emitting a light of constant intensity and shall be designed, located, erected and maintained only for the purposes of illuminating the subject sign and/or premises

**7.5. Earthwork and the Importing and Exporting Of Earth Products**

1. The following importing or exporting of earth products such as, but not limited to, earth loam, topsoil, sand, gravel, clay, stone or minerals is permitted in any zone provided that the importing or exporting shall only involve the minimum quantity of material necessary to make such lot, site, or right-of-way suitable for the proposed use.
  - a. Necessary importing or exporting of earth products in direct connection with the building construction, structural alteration or site improvements on a lot for which only a building permit is required.
  - b. Necessary importing or exporting of earth products in direct connection with required site improvements in accordance with an approved subdivision plan.
  - c. Necessary importing or exporting of earth products in direct connection with street or utility improvements within a public right-of-way for which the City Department of Public Works or State Department of Transportation has granted a street opening permit.
  - d. Necessary importing or exporting of earth products in direct connection with the installation or relocation of heavy machinery or in connection with the installation, relocation or repair of on-site utilities.
  - e. The importing or exporting of not more than 50 cubic yards of earth products for the purpose of landscaping, building construction, structural alteration, or site improvements provided that in no case shall the importing or exporting of material cause adverse conditions on neighboring properties. For buildings exempt from Site Plan Review under Section 9.3.8.2, the import of only structural fill material is exempt from site plan review per item 2 below.
  - f. Necessary importing or exporting of earth products in direct connection with the removal of a building or structure for which a demolition permit has been issued, provided that the amount of fill shall be limited to the minimum quantity necessary to restore the site to grade and permit landscaping or site restoration as shown on a site and grading plan approved by the City Planner or Zoning Official.
2. Any other importing or exporting activities require Site Plan approval by the Planning and Zoning Commission.
3. At no time shall any open test holes, excavation pits or similar manmade depressions or stockpiles of natural or manmade material or debris be left in an exposed state either permanently or for a period longer than necessary to complete construction

**7.6. Corner Visibility**

1. On public streets, no structure, wall, fence, shrubbery, trees, or object shall be erected, maintained, planted, or parked on any lot which unreasonably or dangerously obstructs or interferes with visibility of drivers of vehicles on a curve or at any street intersection. The minimum vision clearance shall require a height not exceeding 3 feet above the street grade within 25 feet of the intersecting street lines bordering corner lots.



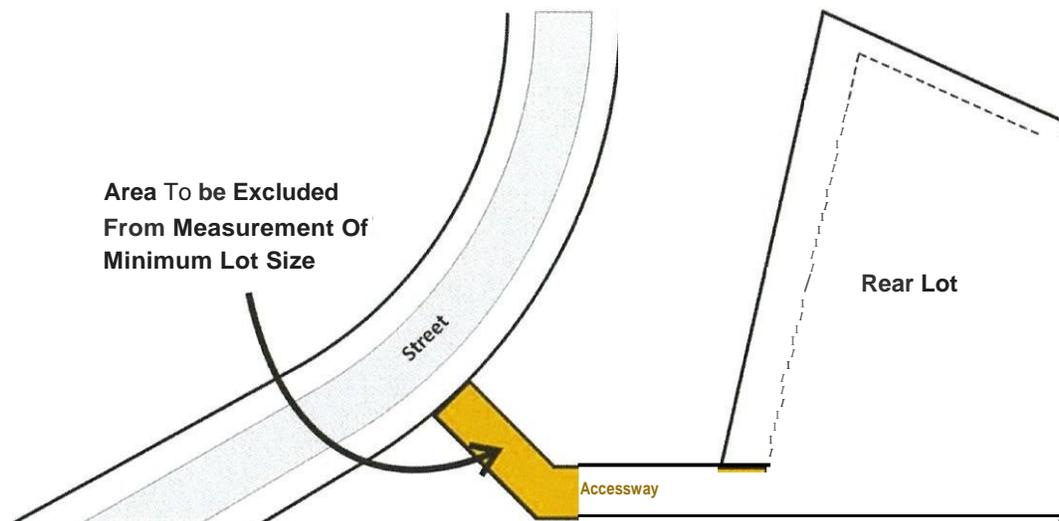
## 7.7. Access Drives, Accessways and Access Management

### 1. Access Drives

- a. No driveway or access to or from any property shall be so located at its juncture with a street as to create a danger or menace to the community or to the convenience or proper use of the adjacent property.
- b. No driveway shall provide access to a lot located in another Zoning District, if said lot is used for any use, principal or accessory, not permitted in the district in which such driveway is located.
- c. No driveway shall be located closer than 50 feet to any street intersection measured along the street lines. In any non-residential district, no two driveways on the same lot shall be located closer than 25 feet to each other at their closest limits.

### 2. Accessways - Basic Limitations

- a. For any lot which does not meet the minimum lot width requirement, a twenty-five (25) foot wide area between the street line and the required frontyard setback shall be excluded in calculating the total area of the lot for purposes of minimum lot size.



- b. An accessway shall not exceed a length of two hundred and fifty (250) feet unless authorized under the provisions of Section 8.2.B, at which point the lot shall be required to meet the lot width requirements of the zone that the lot is located in.
- c. The maximum number of adjoining accessways shall not exceed two, unless otherwise permitted by the Planning and Zoning Commission at the time of subdivision approval.

- d. In an instance where two rear lots are being serviced by separate accessways, a common or shared driveway may be provided anywhere within these access areas in conformance with Section 7.5. Where two or more accessways are adjoining and a common or shared driveway will be provided, the width of each accessway may be reduced from 25 feet to a twenty (20) foot width for each lot being served.

**3. Accessways in Excess of 250 Feet** - Accessways to serve lots may be permitted in excess of 250 feet at the discretion of the Planning and Zoning Commission when the following conditions are deemed to be met:

- a. Accessways are adequate in width, grade and alignment so that all buildings, structures, uses and equipment are readily accessible for fire, emergency, and police protection.
- b. Sufficient utility systems are suitably located and adequately designed to serve proposed uses and protect the public health and welfare.
- c. The accessway shall not exceed a length of 400 feet, at which point the lot must meet the lot width requirements of the zone that the lot is located in.
- d. New utilities provided to service uses and buildings on lots beyond the 250-foot length shall be installed underground.
- e. Where lot size, shape or excessive depths topography and/or significant land features such as bedrock, wetlands, or coastal resources, make it infeasible to comply with the provisions of Section 8.2.A, and would thus deprive the owner or applicant of reasonable use of the property.

**4. Access Management** - In business areas and along major streets, the Commission may:

- a. Seek to reduce or eliminate existing driveways;
- b. Require that property owners provide easements granting the right of access, egress, and passage to the Town and/or abutting properties;
- c. Require that property owners use easements granting the right of access, egress, and passage previously obtained from abutting properties; and/or
- d. Implement other approaches to accomplish access management strategies.

## **7.8. Outdoor Lighting**

### **7.8.A. Purpose**

These regulations are intended to provide specific standards for lighting to maximize the effectiveness of site lighting, to enhance public safety and welfare, to raise public awareness of energy conservation, to avoid un-necessary upward illumination, indirect lighting and illumination of adjacent properties, and to reduce glare.

### **7.8.B. Applicability**

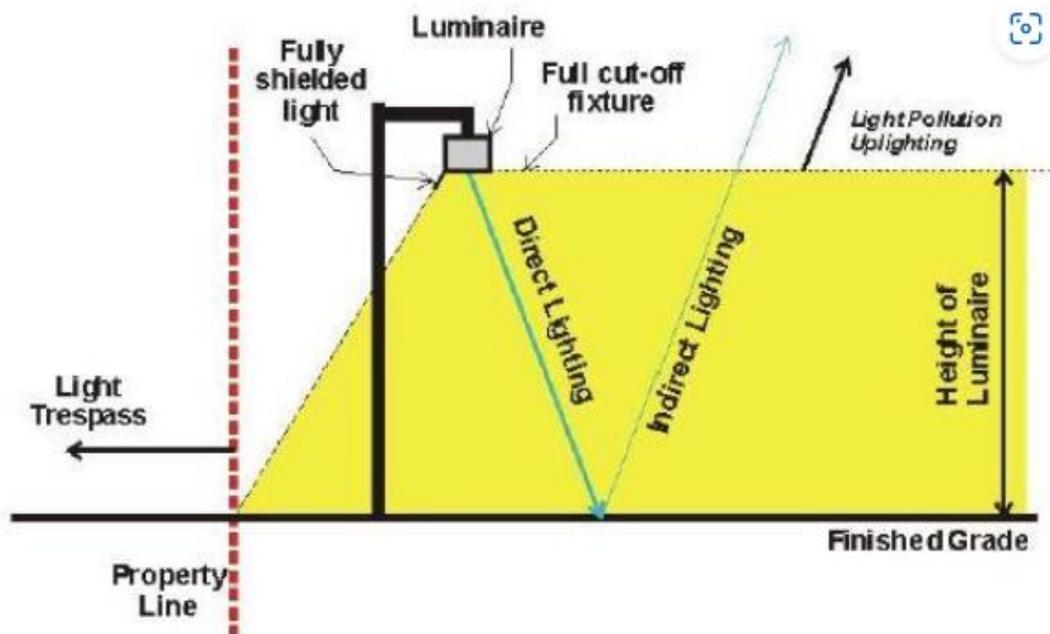
*Except as herein provided*, these regulations shall apply to any outdoor lighting fixtures installed, modified, refurbished, repaired or serviced on private property within the City of Groton.

All businesses, and community roadways, sidewalks and town property luminaires should be planned and installed with the idea of being a “good neighbor” by keeping unnecessary direct light from shining onto abutting lots or roadways, both public and private.

### **7.8.C. Standards**

1. All exterior lights and sign illumination shall be designed, located, installed and directed in such a manner as to:
  - a. Prevent direct or objectionable glare, light trespass, spill light, or obtrusive light;
  - b. Be shielded (full cut off);
  - c. Employ soft, transitional light levels which are consistent from area to area;
  - d. Minimize contrast between light sources, lit areas and dark surroundings; and
  - e. Be confined within the target area.
2. In all non-residential districts and in all areas adjacent to a residential lot, no externally-mounted direct light source shall be visible at the lot line at ground level or above. The direct illumination measured at the lot line shall be zero (0.0) foot-candles, excluding driveway entrances.
3. Lighting designed to highlight flagpoles shall be low level (no more than 100-watt incandescent equivalent) and shall be targeted directly at the flag.
4. Lighting shall include timers, dimmers and/or sensors to reduce unnecessary light level during non-business hours to a minimum level required for overnight security.

- 5. The height of luminaires, *except streetlights in public rights-of-way*, shall be the minimum height necessary to provide adequate illumination, but shall not exceed a height of eighteen (18) feet. The height of a luminaire shall be measured from the finished grade (not the top of a supporting concrete base) to the bottom of the luminaire.
- 6. Light standards within a parking lot shall be located within landscaped islands or buffer strips and shall be set back two (2) feet from any parking space unless wheel-stops are provided.
- 7. In reviewing and approving outdoor lighting, the Commission may utilize recommendations for lighting levels as issued by the Illuminating Engineering Society of North America, the International Dark-Sky Association, or other reference.
- 8. The use of utility poles for outdoor lighting is prohibited.
- 9. Any light determined by the Zoning Official and/or City Planner to be obtrusive, spill light, upward lighting, light trespass, or otherwise not in compliance with these regulations shall constitute a violation.
- 10. A photometric survey shall be submitted as part of any site plan that demonstrates compliance with these standards. Such photometric survey shall show both business hour and non-business hour lighting plans.

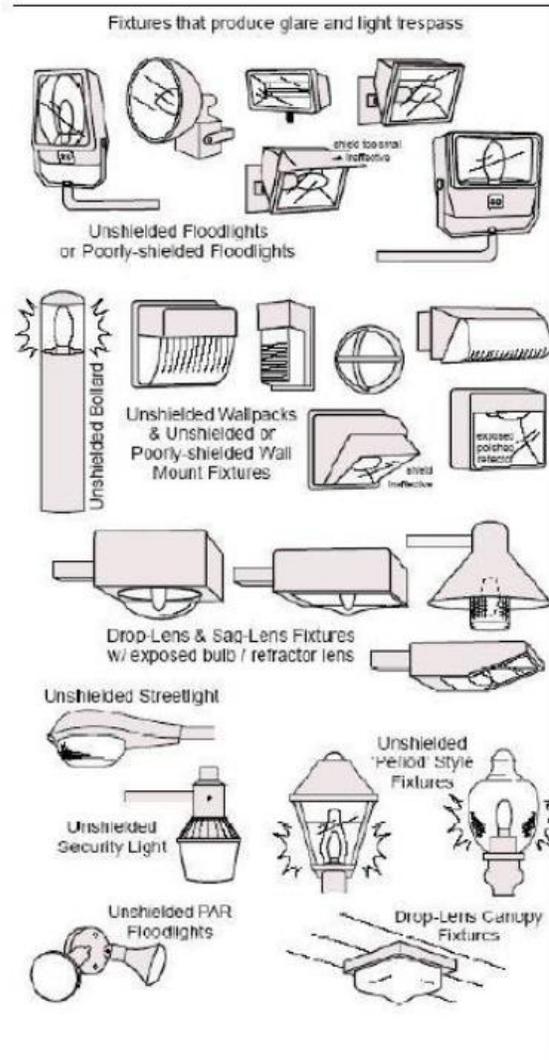
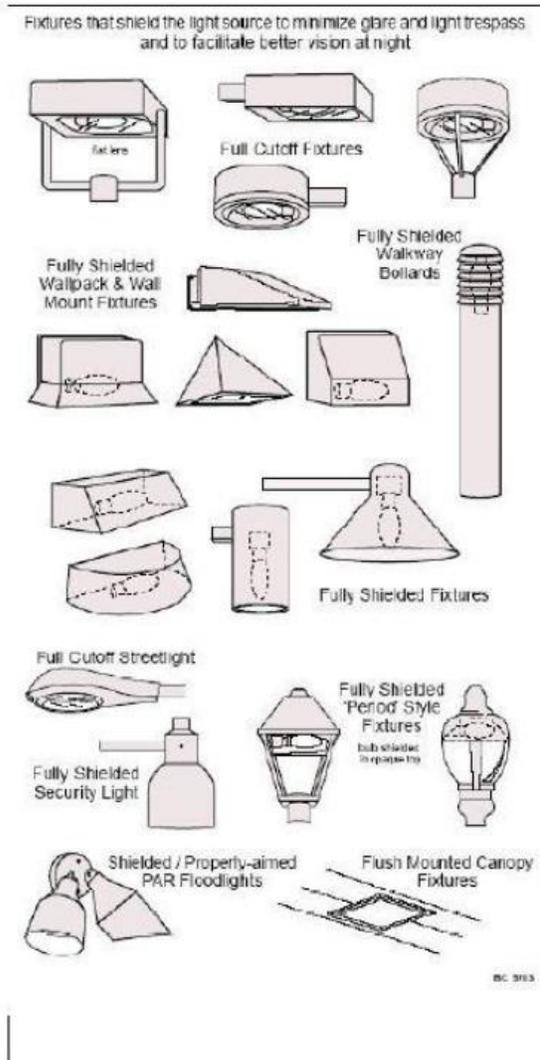


RECOMMENDED

NOT RECOMMENDED

Fixtures Which Would Not Generally Be Expected To Produce Glare or Light Trespass

Fixtures Which Would Generally Be Expected To Produce Glare or Light Trespass



**Table 7.8 Footcandle Standards for Exterior Lighting**

USE(S)	Max. Avg. Exterior fc	USE(S)	Max. Avg. Exterior fc
Community Gardens	0.1	Adult Day Care	2.4 – 0.6
Keeping of Animals		Hotel / Motel	
Cemetery		Take-out Food Service	
Outdoor Café		Funeral Home	
Telecommunications Facility		Golf Course / Country Club	
Accessory Buildings & Uses	0.2	Gas Station, Service & Repair / Rental	
Commercial Farm		Rehab Facility - Outpatient	
Animal Day Care / Training Facility		Natural Resource Removal	
Grooming		Office Building	
Kennel		Multi-Family Dwellings	
Veterinary Hospital		Managed Residential Care Facility	
Family Day Care Home		Refuse Disposal	
Bed & Breakfast		Retail > 20,000	
Rooming & Boarding House		Sale of Firearms	
Home Occupation		Schools	
Public Use & Public Utility		Car Sales, Vehicle Storage	20.0
Residential			
Child Day Care / Nursery School / Group Child Day Care Home		0.8 – 0.2	
Business / Personal Service			
Catering Facility			
Restaurant			
Manufacturing			
Medical Office			
Library & Museum			
Places of Public Assembly (including worship)			
Retail < 20,000			
Sale of Alcohol			
Warehouse & Wholesale w/ indoor Storage			
Surface Parking Lot & Parking Garage	1.5 – 0.5		
Outdoor Storage			
Hospital, Nursing Home			

**7.8.D. Exemptions and Modifications**

1. Temporary holiday lighting is exempt from these Regulations, for a period to be commensurate with the holiday being celebrated, but in no event shall such lighting at a commercial property exceed a duration of 45 days annually in the aggregate.
2. Temporary lighting used by the Police Department, Fire Department or emergency services is exempt from these Regulations.
3. The Commission may, by special permit, allow lighting that does not comply with the requirements of this Section provided the Commission determines, in its sole discretion, that such proposed lighting is consistent with the purpose of these Regulations. The following considerations are provided as guidance:
  - a. That an extraordinary need for security exists because of a history of vandalism or other objective means;
  - b. That in traveled ways or areas, conditions hazardous to the public exists, such as steep embankments or stairs;
  - c. That it would be unreasonable to require replacement of an entire lighting installation because a minor change is proposed to an existing non-conforming lighting installation;
  - d. Special lighting is indicated for historic buildings;
  - e. That ornamental up-lighting of sculpture, buildings or landscape features enhance the character of the area; and
  - f. Such lighting is necessary for special outdoor events and playing fields.
4. The Commission may modify the requirements of Section 7.6.C for a temporary use approved under these Regulations.

## 7.9. Stormwater Management

### 7.9.A. Purpose and Intent

This Section of the Regulations is intended to promote the application of Low Impact Development (LID) strategies for the analysis and design of stormwater treatment systems to:

- Minimize degradation of water resources within the City of Groton from pollution from non-point source runoff;
- Mitigate impacts to the hydrologic system from development, including reduced groundwater recharge and pollutants found in stormwater runoff; and
- Reduce or prevent flooding, stream channel erosion, and/or other negative impacts created by the volume of stormwater runoff resulting from development.

### 7.9.B. Applicability

The provisions of this Section of the Regulations shall apply to any development within the City of Groton which requires approval of a Site Plan in accordance with Section 9.3 of these Regulations or approval of a Special Permit in accordance with Section 9.4 of these Regulations.

### 7.9.C. Requirement

1. Unless modified by the Commission as provided in Section 7.7.D below, any development within the City of Groton shall implement the following provisions of Chapter 7 of the Connecticut Stormwater Quality Manual (CSQM), as amended:
  - a. Pollutant Reduction (CSQM Section 7.4).
  - b. Groundwater Recharge and Runoff Volume Reduction (CSQM Section 7.5).
  - c. Peak Flow Control (CSQM Section 7.6) for the 10-year, 25-year, and 100-year storm events.
2. In the design of a stormwater management system, design professionals may utilize low impact development techniques as contained in the Connecticut Stormwater Quality Manual, as amended.

### 7.9.D. Modifications

The Commission may, by Special Permit, reduce the requirements as specified in Section 7.7.C provided that adequate information has been submitted by the applicant for the Commission to evaluate the request and:

1. The City Engineer has provided a recommendation such requirements cannot reasonably be attained at the subject property and/or such requirements would be of limited practical benefit at the subject property; or
2. The Commission has received a report from a professional engineer hired by the Commission, at the applicant's expense, providing a positive recommendation regarding the modification.

7.10. Performance Standards

**7.10.A. Applicability**

1. The performance standards of this Section shall apply to all lands, buildings, structures, and uses in all zones, whether a permitted use, a special permit use, an accessory use or a non-conforming use.
2. Initial and continued compliance with these performance standards shall be required of every building, structure and use.

**7.10.B. General Standard**

1. No building or use shall create any dangerous, injurious, noxious, or otherwise objectionable fire, explosive, or other hazard; noise or vibration; smoke, dust, odor or other form of air pollution; heat, cold, dampness, electromagnetic or other substance, condition or element in such manner, or in such amount, as to adversely affect the reasonable use of the surrounding area or adjoining premises (referred to herein as “dangerous or objectionable elements”); *except in accordance with the performance standards set forth hereinafter.*
2. In addition to the performance standards set forth hereinafter, all relevant provisions of any other Federal, State and City laws and Regulations shall also apply.

**7.10.C. Standards for Dangerous or Objectionable Elements**

1. **Smoke, fly ash and other dusts, gases, fumes, odors and dust-producing substances** - No person shall cause or allow any smoke, fly ash and other dusts, gases, odors, fumes and dust-producing substances to be discharged or emitted into the open air, *except in accordance with State or Federal statutes and regulations thereunder.*
2. **Fire and explosion hazards** -All activities involving, and all storage of, inflammable and explosive materials shall be protected at any point, with adequate safety devices protecting against the hazard of fire and explosion and with adequate fire-fighting and fire suppression equipment and devices.
3. **Heat** - Heat, defined as thermal energy of a radiative, conductive or convective nature, emitted at the lot line by any use or facility shall not exceed the temperatures tolerable to plant or animal life.
4. **Radioactive or electromagnetic disturbance** - No activities shall be permitted which emit dangerous radioactivity at any point, or electromagnetic disturbance adversely affecting the operation, at any point, of any equipment other than that of the creator of such disturbance,

5. **Noise** - The maximum sound pressure level radiated at the lot or street line by any use or facility shall not exceed the values tolerable in a specifically affected residential neighborhood, unless such levels are specifically authorized as an integral part of a Special Permit approval and Site Plan approval.
6. **Vibration** - No vibration shall be permitted which is detectable without instruments at the lot or street line.
7. **Direct and Indirect Glare** - Glare caused by direct or specifically reflected rays from incandescent, fluorescent, or arc lighting, or caused from high temperature processes, such as welding or metallurgical refining, or caused by diffuse reflection from a surface, such as a wall or roof of a structure, shall not be permitted at or beyond the lot line. Deliberately induced sky- reflected glare, as by casting a beam upward for advertising purposes, is specifically prohibited.
8. **Liquid or Solid Waste** - No discharge or deposit shall be permitted at any point into any sanitary sewerage systems, waterbodies, watercourses, or into the ground, of any materials of such quantity, nature or temperature as can contaminate any water or land or otherwise cause the emission of dangerous or objectionable elements, *except in accordance with the State and City Health and/or Sanitary Codes.*
9. **Waste materials** - Waste materials used for the purpose of fill may be permitted only in areas designated by the Commission, subject to Special Permit approval and Site Plan approval in accordance with Section 7.3, herein.
10. **Erosion and Sedimentation** -
  - a. All development activities shall utilize “best management practices” to prevent and minimize soil erosion and sedimentation,
  - b. Soil erosion and sedimentation control measures appropriate to the circumstances shall be installed prior to the commencement of development activities and shall be maintained throughout the development process.
  - c. Such soil erosion and sedimentation control measures shall be planned, engineered and installed in accordance with the standards and specifications of the “Connecticut Guidelines for Soil Erosion and Sediment Control”, as amended.
  - d. The Commission or its designated agent is hereby authorized to make periodic inspections of the soil erosion and sediment control measures on any site under development and, if necessary.
    - Issue an order to cease and desist from activities resulting in erosion or sedimentation and immediately institute remedial measures.
    - Require preparation and submittal of a remedial plan showing permanent corrective action followed by implementation and maintenance of such plan as approved by the Commission.
    - Revoke any permit for construction if erosion and sediment control measures are not installed in a timely manner.
  - e. Soil erosion and sediment control measures may be bonded as part of any development project in accordance with Section 9.9.L.

**7.10.D. Administration and Enforcement**

1. **Written Statement May Be Required** - As a part of any application for a Special Permit or Building Permit, the Commission, City Planner, or Zoning Official, respectively, may require that the applicant submit a written statement of the proposed use of the building, structure or use for which the application is made, together with a certificate by a registered professional engineer, qualified scientist, or other recognized authority as to his/her best estimate as to the impact of the proposed use from the standpoint of the standards set forth in Section 7.8.C of these Regulations, and what, if any, environmental protection measures will be taken .
2. **Other Approvals** - Where certain aspects of a proposed use are regulated by State or Federal governmental agencies, no Certificate of Occupancy shall be issued for any building, structure or use until approvals are obtained from such agencies and copies thereof are submitted to the Commission or Zoning Official.
3. **Response To Possible Violation** - As a result of a complaint or investigation of a possible violation, the Zoning Official may require that the owner or operator submit a written statement regarding the use of the building, structure or use, together with a report by a registered professional engineer, qualified scientist, or other recognized authority as to the compliance of the use relative to the standards set forth in Section 7.8.C of these Regulations, and what, if any, environmental protection measures will be taken.
4. **Measurements** - Measurements to determine present compliance and estimates to determine future compliance may be made by, and at the discretion of, the Zoning Official, City Planner, Fire Marshal, Ledge Light Health District, or other officer of the City or their qualified agents. The Zoning Official may, at his discretion, require the owner or user of the property to furnish current measurements or estimates within a reasonable time in appropriate cases.