### TO BE PUBLISHED IN THE JOURNAL INQUIRER FRIDAY, JANUARY 15, 2021 AND THURSDAY, JANUARY 21, 2021 SOUTH WINDSOR PLANNING & ZONING COMMISSION

Notice is hereby given that there will be a Public Hearing on Tuesday, January 26, 2021 at 7:00 PM held by way of an Online WEBEX Conference Meeting to consider the following:

- 1. **PZC Sponsored Zoning Text Amendment** request for a Zoning Text Amendment to modify Section 7.15 Outdoor Dining Permits to increase the number of tables/seats allowed through staff approval to 24 Tables/96 Seats
- 2. **PZC Sponsored Zoning Text Amendment** request for a Zoning Text Amendment to modify Section 7.12 Home Animal Agriculture to allow chickens on properties with less than one acre and to establish criteria for beekeeping

To view this meeting, please tune into Channel 16 (if your provider is Cox Cable) or Channel 6082 (if your provider is Frontier), or go to: gmedia.swagit.com/live

To call in with comments to this meeting, please call Webex Conference Call-In Number: (855) 925-2801 (Meeting Code Number to be provided on the agenda.)

Copies of the application are on file in the office of the Town Clerk or/and Planning Department, and online at <a href="https://www.southwindsor-ct.gov/planning-department/pages/planning-and-zoning-commission-applications">https://www.southwindsor-ct.gov/planning-department/pages/planning-and-zoning-commission-applications</a>. At this hearing, interested persons may be heard by calling into the meeting, and written comments by the public will be received by mail or email to <a href="mailto:planningzoningcomments@southwindsor-ct.gov">planningzoningcomments@southwindsor-ct.gov</a>. Persons who may require an accommodation can contact staff Monday – Friday, 8:00 a.m. to 4:30 p.m. at (860) 644-2511, ext. 329.

Bart Pacekonis, Chairman PLANNING & ZONING COMMISSION

### **Section 7.15 Outdoor Dining Permits – DRAFT 9-25-20**

- **A.** Applicants may apply to the Commission for an outdoor dining permit for a restaurant as follows:
  - 1. Permit for 6 tables/24 seats 24 tables/96 seats or less: The applicant shall provide an adequate plan indicating locations of tables, chairs, etc., associated with the outdoor dining in relation to the location of buildings, sidewalks, parking spaces, and driveways. Said permit application shall be submitted to the Town Planner Director of Planning, and may be reviewed and approved by the Town Planner Director of Planning provided said application is consistent with the requirements of the criteria enumerated in Section 7.15.B.1. through 12. and is consistent with the intent of these regulations.
  - 2. Permit for more than 6 tables/24 seats: 24 tables/96 seats: The applicant must provide the following information on a site plan of development prepared in accordance with Article 8 of the zoning regulations: a. Location of building(s);
    - b. Number of parking spaces required for entire restaurant, plus location of required parking;
    - c. Location of proposed outdoor dining, including surface upon which tables will be placed (for example, existing sidewalk, new flagstone patio, heaters, etc.);
    - d. Number of tables/seats identified; and
    - e. Written description of outdoor dining area amenities; for example, "15 wrought iron tables, 30 wrought iron chairs, an umbrella over each table, new awnings", etc.
- **B.** The Commission may grant an approval for seasonal outdoor dining areas for restaurants, subject to the following conditions:
  - 1. Outdoor dining area cannot be located on public property (Town sidewalk, right-of-way, etc.). Outdoor dining may be allowed on porches or decks, provided all of the other conditions are met.
  - 2. Outdoor dining does not result in interference with, or hazards to, or visibility problems for, pedestrians on sidewalks or vehicular traffic.
  - 3. Any non-vegetative shading devices shall be of a non-permanent type (umbrellas, retractable awnings, etc.) and shall be safely anchored.
  - 4. Areas on which required parking exists cannot be used for outdoor dining.
  - 5. If required, additional parking must be provided to accommodate additional patrons.
  - 6. Adequate trash receptacles must be provided, and the restaurant is responsible for cleanup of all trash generated from the outdoor dining (including the restaurant site and surrounding areas).
  - 7. Tables must be located in such a manner as to maintain access to the building for emergency services.
  - 8. Low level exterior audio systems for mood music are permitted in outdoor dining areas only if volumes are kept low and are not offensive to persons on abutting properties. In areas with abutting residential uses, the applicant shall periodically monitor noise volumes along all common property lines with said residential uses, and report said volumes to the Town Planner Director of Planning at least once every summer, or as the Town Planner Director of Planning otherwise directs. Volumes shall not exceed those allowed in the Town of South Windsor's noise ordinance.

### **ARTICLE 7 – SPECIAL REGULATIONS**

- 9. In addition to required parking for indoor seating, outdoor dining requires 1 parking space for every 4 seats.
- 10. All tables, chairs, trash receptacles, etc., shall be removed at the end of each outdoor dining season.
- 11. Outdoor dining area cannot exceed 16 tables/48 seats unless there are waitpersons to serve patrons. Where all food service is conducted by waitpersons, outdoor dining area cannot exceed 50% of the floor area of the indoor dining area; and cannot exceed 50% of the number of tables/seats within the indoor dining area.
- 12. Any signage placed on outdoor umbrellas, awnings or chairs shall be limited to the name of the establishment.

# PZC SPONSORED OUTDOOR DINING ZONING AMENDMENT PH 1/28/21

- 1. This is a proposal for a zoning text amendment to Section 7.15 Outdoor Dining Permits to increase the number of tables/seats allowed through staff approval to 24 Tables/96 Seats
- 2. Currently, a restaurant owner is limited to requesting a maximum of 4 tables, maximum 16 seats before being required to apply to the PZC for site plan approval. Under the proposed text, an applicant would be allowed 24 table/96 seats with staff level review/approval. Details regarding location of proposed tables in relation to the site layout would be required as well as criteria listed in Section A.2. Outside dining proposals greater than 24 tables /96 seats would require PZC approval.
- 3. The Planning Department supports these proposed changes as the demand for outdoor dining has increased particularly during the pandemic. As a result of one of the Governor's Executive Orders, staff has created a streamline application process for temporary outside dining requests which includes review (and approval) by several departments –planning, building, health, fire, police and engineering. This new language will provide a process for our existing restaurants that have been operating under a temporary permit, make there outside dining arrangements permanent.
- 4. The Business Development section of the Town Plan has one of its goals for the town to "attract additional business development that is consistent with the character and scale of its surroundings with a strategy to maintain current business zones, with updates."
- 5. The Capitol Region Council of Governments has reviewed the proposed amendment as required. CRCOG provided the following report dated 1/15/21.



January 15, 2021

TO: SOUTH WINDSOR PLANNING AND ZONING COMMISSION

REPORT ON ZONING REFERRAL Z-2020-95: Proposed zoning amendment pertaining to home animal agriculture including but not limited to lot size requirements, honey bees, and structures as well as amendments pertaining to outdoor dining and increasing the of the number of tables/seats permitted.

**COMMISSIONERS:** Receipt is acknowledged of the above-mentioned referral. Notice of this proposal was transmitted to the Policy and Planning Division of the Capitol Region Council of Governments under the provisions of Section 8-3b of the Connecticut General Statutes, as amended.

**COMMENT:** The staff of the Regional Planning Commission of the Capitol Region Council of Governments has reviewed this zoning referral and finds no apparent conflict with regional plans and policies or the concerns of neighboring towns. The staff supports the expansion of outdoor dining opportunities, which are even more critical during the COVID-19 pandemic. The staff also commends the efforts around beekeeping and other home animal agriculture, which directly supports the regional Plan of Conservation and Development policy to encourage zoning regulations that address urban agriculture and local food systems.

The public hearing date has been scheduled for 1/26/2021.

In accordance with our procedures this letter will constitute final CRCOG action on this referral. Questions concerning this referral should be directed to Caitlin Palmer.

**DISTRIBUTION:** Planner: Hartford, Windsor, East Windsor, Ellington, Vernon, Manchester, East Hartford

Respectfully submitted,

Jennifer Bartiss-Earley, Chairman Regional Planning Commission

Brendan Malone, Vice Chairman Regional Planning Commission

Caitlin Palmer

Senior Community Development Planner

# PZC SPONSORED ANIMAL AGRICULTURE ZONING AMENDMENT PH 1/26/21

- 1. This is a proposal for a zoning text amendment request for a Zoning Text Amendment to modify Section 7.12 Home Animal Agriculture. The proposed changes address the keeping of chickens on properties as well as criteria for bee keeping.
- 2. Currently, Table 7.12.1A requires a minimum of 1 acre to be able to permit the keeping of chickens/hens. Many years ago the PZC had adopted a policy that allowed up to 5 chickens as of right. This proposed text change would permit up to 16 chickens to be kept on properties with less than one acre in the A-20 and A-30 zones and will require an animal agriculture permit. Roosters are allowed only in A-40 and RR zones on properties with more than one acre.
- 3. The proposed text also provides definitions related to beekeeping and establishes criteria for the keeping of bees on properties. The bee hive density can be found in Table 7.12.2A Hive Units, including the number of hives/nucs based on size of properties. Other criteria include the treatment of screening barrier related to distance of hives from the property line, requirement of a water source and annual registration with the State in accordance with CGS 22-89.
- 4. Other minor text changes include addressing the distance of manure storage areas from property lines, clarification of requirements for structures housing animals and minor changes to the home animal agriculture permitting process.
- 5. The proposed text also includes allowance of animal sanctuaries and/or animal rehabilitation facilities by Special Exception as described in the Commercial Animal Agriculture section of the regulations.
- 6. The Planning Department supports these proposed changes as we often get requests to keep chickens in areas of town that have less than the one acre required. This new language will provide a process for property owners to permit their animals after demonstrating compliance with the regulations.

- 7. The Town Plan of Conservation and Development Residential Development section of has one of its goals to protect established neighborhoods from incompatible development and activities by careful review of proposed uses. In addition, by permitting additional commercial opportunities of sanctuaries or rehabilitation facilities, it allows additional opportunities for some of the larger farms in our rural areas and can help to continue to preserve farmland in our community.
- 8. The Capitol Region Council of Governments has reviewed the proposed amendment as required. CRCOG provided the following report dated 1/15/21.

### Final Draft 11-25-20 - Proposed changes in red

### **Section 7.12 Horses/Ponies and Home Animal Agriculture**

### 7.12.1 Home Animal Agriculture

- **A.** Home animal agriculture includes animals bred, raised or kept for non-commercial purposes including but not limited to horses and ponies, cattle, swine, sheep, goats, rabbits, poultry and fowl, and bees, but excluding common household pets such as (but not limited to) cats and dogs.
- **B.** Home animal agriculture may be conducted in all A, AA and RR residential districts.
- C. A zoning compliance permit must be obtained from the Zoning Enforcement Officer.

### D. Criteria for Evaluating Home Animal Agriculture Applications

- 1. The number of animals shall not exceed those established in Table 7.12.1A or 7.12.2A.
- 2. The land on which the animals are to be kept is capable of safely supporting the number and type of animals proposed.
- 3. The animals will be kept in a manner so as to not create a hazard to themselves or the environmental quality of the neighborhood.
- 4. The animals are to be kept for non-commercial purposes.
- 5. The animals are kept in a manner that conforms to all applicable regulations of the Public Health Code, the Department of Environmental Protection, the Connecticut Department of Agriculture, and the General Statutes of Connecticut.

### E. Required Standards for Home Animal Agriculture

Prior to approving any application for a zoning permit for Home Animal Agriculture, the Zoning Enforcement Officer shall consider each application with regard to the criteria set forth in Table 7.12.1A or Table 7.12.2A and shall also determine whether such proposed activity shall conform to the following standards:

#### 1. Number of Animals Per Acre

- a. The minimum lot size on which animals may be kept shall be 1 acre which may include a dwelling; with the exception of chickens/hens and bees. Property owners may have 16 chickens/hens on properties with less than an acre in the A-20 and A-30 zones. Bees may be kept on lots of all sizes.
- b. No more than 1 animal unit shall be kept on each acre owned up to a total of 3 animal units on 3 acres. More than 3 animal units shall be considered Commercial Animal Agriculture and subject to the regulations governing such use.
- c. The number and type of animals constituting an animal unit as well as the number of animals permitted by lot size is as follows:

Table 7.12.1A – Animal Units

Type of Animal	Number of Animals Per Animal Unit	No. of Animals Permitted on		
		1 acre	2 acres	3 acres
Horse, pony, mule, donkey, dairy or beef cow, alpaca, llama	1	1	2	3
Sheep or goats	5	5	10	15
Pigs (excluding 1 litter under 3 months)	2 mature pigs plus 1 litter (3 months or less)	2 plus 1 litter	4 plus 1 litter	6 plus 1 litter
Rabbits	25	25	50	75
Chickens	32	32	64	96
Ducks	16	16	32	48
Geese, turkeys	8	8	16	24
Bee Hives	See Table 7.12.2A			

- d. No roosters are permitted in A-20, A-30, or AA-30 zones. Roosters are only allowed in the A-40 and Rural Residential zones, on lots 1 acre or larger.
- e. Combinations of different animals and fowl are permitted provided the total number of permitted animal units are not exceeded for the available acreage. For example, 2 sheep and 16 chickens would be permitted on 1 acre; however, 1 cow and 16 chickens would not be allowed.
- f. All animals must be contained on the owner's property.

### 2. Beehive Density

**Table 7.12.2A – Hive Units** 

Acreage	Number of Hives Permitted	Number of Nucs Permitted
< 1/4 - 1/4	2	2
<del>1</del> /4 - 1	6	4
> 1	No limit, follow placement guidelines	No limit, follow placement guidelines

Limitations will not be imposed under the following two conditions:

- a. If hives are situated more than 200 feet from a property line; or
- b. If the adjoining property is permanently protected as undeveloped land.

### 3. Space Standards

- a. Each animal will have free access to shelter in a building, which will provide shade and protection from wind, rain and snow. A minimum of 100 square feet of interior floor space shall be provided for each animal unit or part thereof. All such buildings shall be constructed and all food products kept as to prevent offensive odors and the presence of pest and predators.
- b. Fences must be of sufficient height, strength, pole diameter, gauge of wire, and density to assure that such animals shall not escape. Barbed wire fences will shall not be used. Electric fencing is permitted provided it is installed and maintained in accordance with manufacturer and/or industry standards. Signs and/or other markers identifying the electric fence must be installed.
- c. Large and medium-sized animals including horses, cattle, sheep, goats, and swine shall have access to exercise and living space compatible with their age and size. A minimum of 1,000 square feet of fenced exterior exercise area shall be provided for each animal unit of large and medium sized animals kept.
- d. All structures housing animals must meet the established setback for the applicable zone or be a minimum of 15 feet from the property line, whichever is greater.
- e. Bee hives should be placed in a quiet part of the yard. The hive entrance should be placed facing the hive owner's property. The hive must be at least 15 feet from a property line, and there should be either a fixed wall or a dense vegetative barrier of at least six (6) feet in height between the hives and the property line (unless placed greater than 25 feet from the property line). A water source shall be made available.

### 4. Site Suitability

Ideal sites for animal shelters and animal keeping areas are those reasonably high and well-drained yet level enough to accommodate barn and fence construction and level paddocks or exercise areas.

- a. Slope: Sites with slopes greater than 15% should be avoided or improved to avoid heavy surface water runoff, soil erosion, sedimentation or hazardous conditions for keeping animals.
- b. Drainage: Proper drainage shall be provided to avoid the collection of water. Water shall be diverted from animal keeping areas; however, such water shall not pollute surface or subsurface water supplies.
- c. Wetlands: Wetlands may be used for pasture during the grazing season but shall be avoided when constructing shelters and exercise areas.
- d. Septic System: Animal keeping areas shall not be permitted directly over land containing an on-site sewage disposal system.
- e. Natural or Man-Made Hazards: Sites containing excessive bedrock outcroppings, large boulders or numerous stones or other natural or man-made obstructions that might be hazardous to the animals shall be avoided.

#### 5. Environmental Impact

a. Animals shall be kept in a manner as to minimize noise, odor and dust generation and to avoid air and water pollution.

- b. Shelters and keeping areas shall not be a breeding place for rodents or flies.
- c. Manure storage shall be a minimum of 20 feet from the property line.

### F. Advisory Opinions

1. The Zoning Enforcement Officer may refer the application to the University of Connecticut Cooperative Extension Service or any other applicable organization for review and advisory opinion.

### G. Application for Home Animal Agriculture Permit

- 1. Where 1 animal unit consists of multiple animals, the keeping of animals comprising 10% or less of the total animals in an animal unit is permitted as of right, except for chickens/hens which require a permit regardless of number. Where the keeping of animals will exceed the 10% allowance in paragraph 1 above, or to keep chickens/hens (and/or hens) on your property, the owner of the land on which the animals are to be kept shall submit to the Zoning Enforcement Officer the following:
  - a. A sketch map (using the best available boundary/site data) showing:
    - i. The boundaries of the property on which the animals are to be kept and the names of the abutting owners;
    - ii. Location of existing structures including dwellings on abutting properties, on-site wells and sewage disposal systems;
    - iii. Location of proposed animal shelter and keeping areas, including fences;
    - iv. Number and type of animals to be kept;
    - v. Location of watercourses, waterbodies and wetlands; and
    - vi. Areas of slope in excess of 15%; Town of South Windsor topography maps may be used to determine slope.
  - b. A narrative describing:
    - i. The total acreage of the site on which animals are to be kept;
    - ii. The general nature and scope of the proposed use; and
    - iii. The provisions for storage of feed, grain, hay and animal excrements.
- 2. Beekeepers must submit documentation of annual registration to the State of Connecticut Entomologist in accordance with CGS 22-89.

#### Add to Section 10 – Definitions

**Animal Agriculture, Commercial:** Animals including but not limited to horses, cattle, swine, sheep, goats, rabbits, poultry, fowl, dogs, cats, bees, fish and furbearing animals that are bred, raised or kept for commercial purposes, or kept in a sanctuary or rehabilitation facility.

Apiary – A place where bee hives are kept

Beekeeping – The management and stewardship of honey bees.

Hive – One colony of bees, with one queen. It can range is size from one box to many boxes in height.

Nuc – A 4-5 starter colony that is used to establish new colonies or replace colonies that have died over the winter.

### 7.12.2 Commercial Animal Agriculture or Home Agriculture in Excess of 3 Acres/Animal Units

Land, buildings, and other structures may be permitted as a Special Exception by the Commission for commercial use involving the following animal agriculture activities:

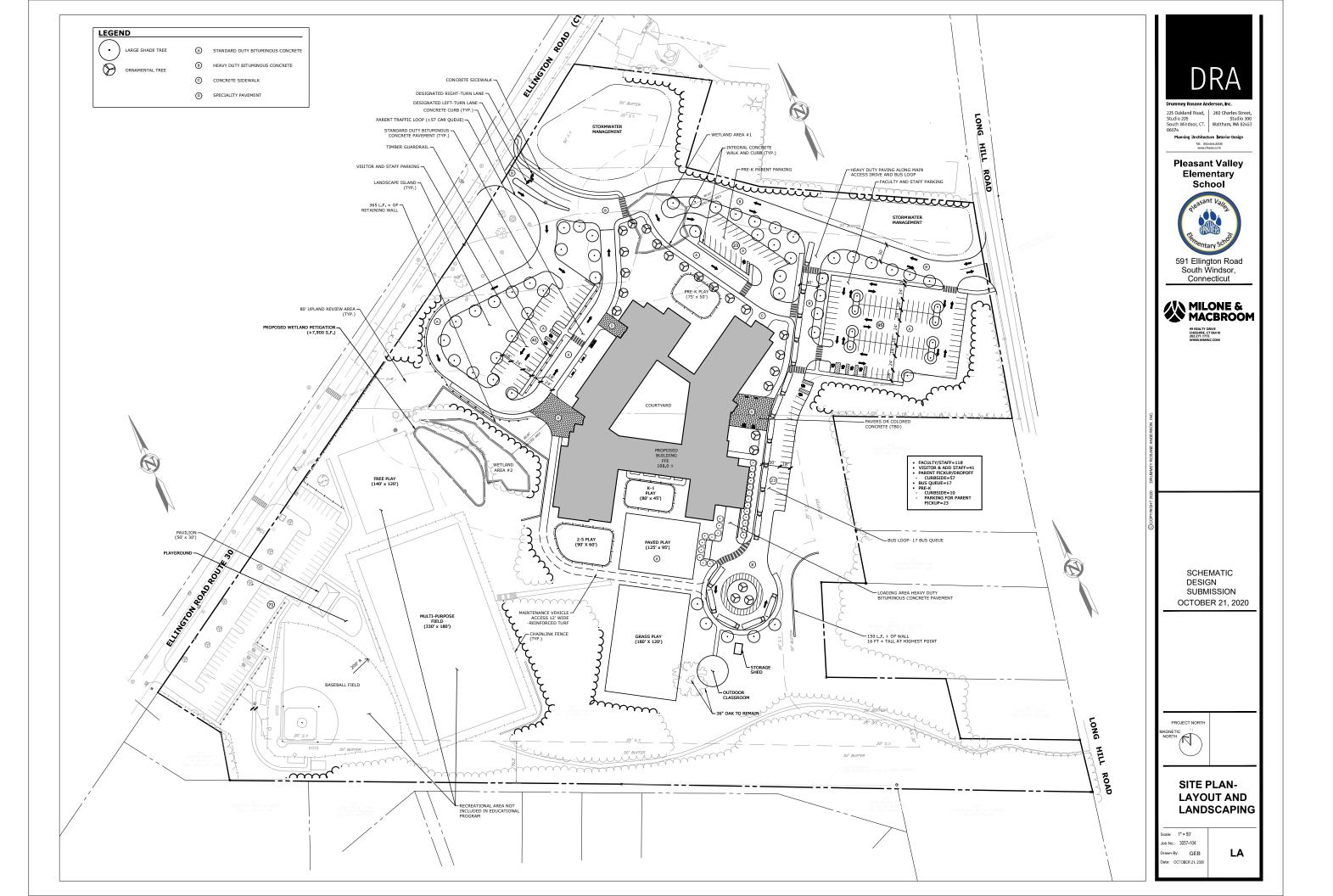
- 1. Boarding and training stables for horses;
- 2. Private club riding stables;
- 3. Breeding stock farms;
- 4. Animal agriculture involving more than 3 animal units;
- 5. Animal sanctuaries (both commercial or non-profit); and
- 6. Animal rehabilitation facilities.

In addition to the standards of Section 7.12.1, the following conditions must be met;

- 1. The land shall be zoned RR or A-40.
- 2. This acreage shall be fenced, in whole or in part. Such fence shall contain the animals within the property; except any land to be used exclusively for riding trails, which shall be owned by the applicant, shall not ordinarily be required to be fenced.
- 3. There shall be sufficient off-street parking facilities provided to accommodate all users and visitors to the property, including spectators. The roads for entering and leaving the property shall be located in such a manner as to not create a pedestrian or vehicular traffic hazard on any public street. A minimum of 1 parking space per each 5 users or visitors to the property shall be required.
- 4. The keeping of animals for other than personal use shall be restricted to the rear yard of the premises, as defined in Section 3.1.2. The accessory buildings that are used to shelter or feed the horse shall be located at a minimum distance of 125 feet from any street line, 40 feet from any side or rear property line and, in addition, 100 feet from any dwelling located on an adjacent property. Outside feed troughs shall be located at the same minimum distance from all property lines as are accessory buildings.
- 5. The number of animals to be kept on-site in a sanctuary or rehabilitation facility shall be limited to Best Management protocols to ensure adequate shelter and exercise space.
- 6. Any portion of the land which is used as a riding ring or corral shall be placed within the front, rear and side yard lines of Section 3.1.2 Residential Area, Density, and Dimensional Requirements.

- 7. Manure shall not accumulate to cause any health hazard and shall be subject to inspection by the Environmental Health Officer. Any manure storage area shall be screened. Particular attention shall be paid to the location of any manure storage. Adequate fly control measures shall be required.
- 8. Fire control facilities for the barns and other accessory buildings shall be required where the public is allowed admission. Such control facilities shall be subject to review of the Fire Marshal.
- 9. The use of public address systems, the conduct of the instruction of riders, training of horses, and the spectator participation in any type of competition shall be modulated and continuously controlled in order to avoid becoming a nuisance to the surrounding neighbors. All public activity shall cease at 8:00 p.m. and shall not begin prior to 7:00 a.m., unless permission for such activity is specifically granted by the Commission.
- 10. The use of temporary buildings or trailers for the stabling of animals in excess of 7 days is prohibited. Trailers must be placed in accordance with Section 7.19 Trailers and Camping Vehicles.
- 11. The area shall be landscaped to harmonize with the character of the neighborhood. The land shall be so maintained that it will not create a nuisance as determined by the Commission. All lighting must meet the requirements of Section 6.3 Outdoor Lighting.

PLANNING DEPARMENT FINAL DRAFT – 11/25/20

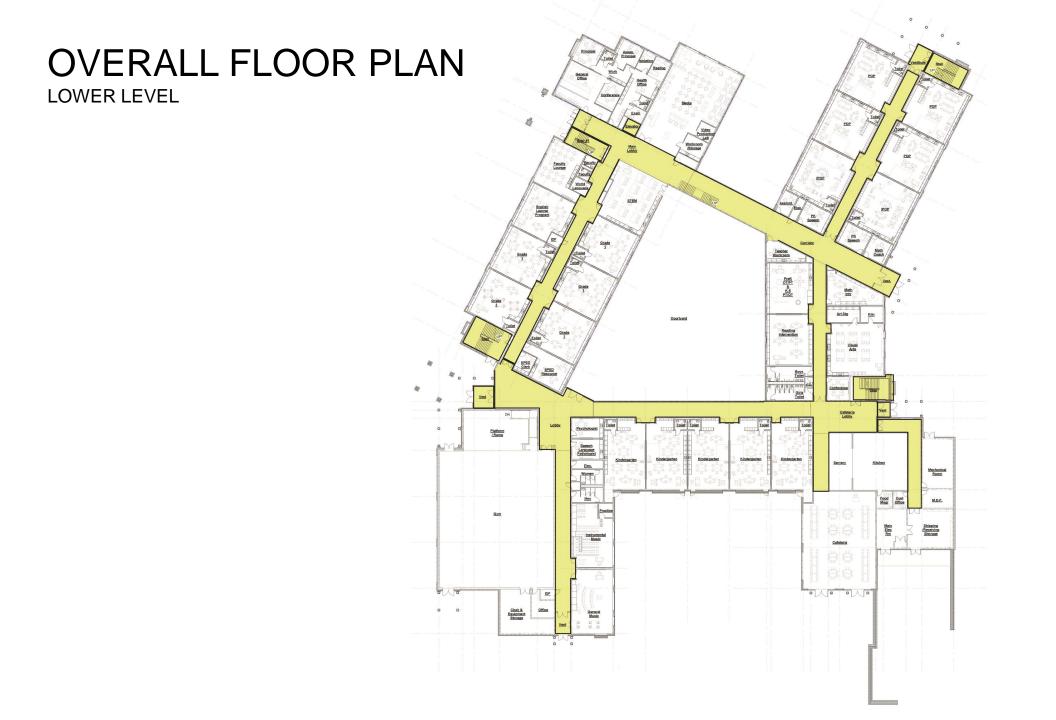


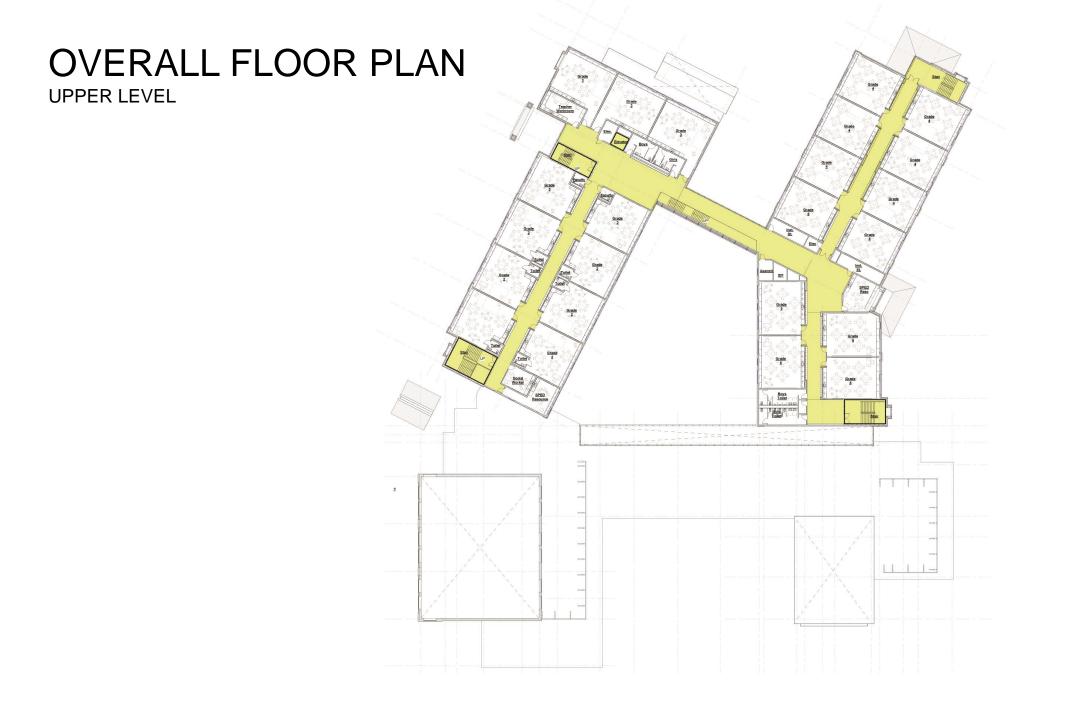






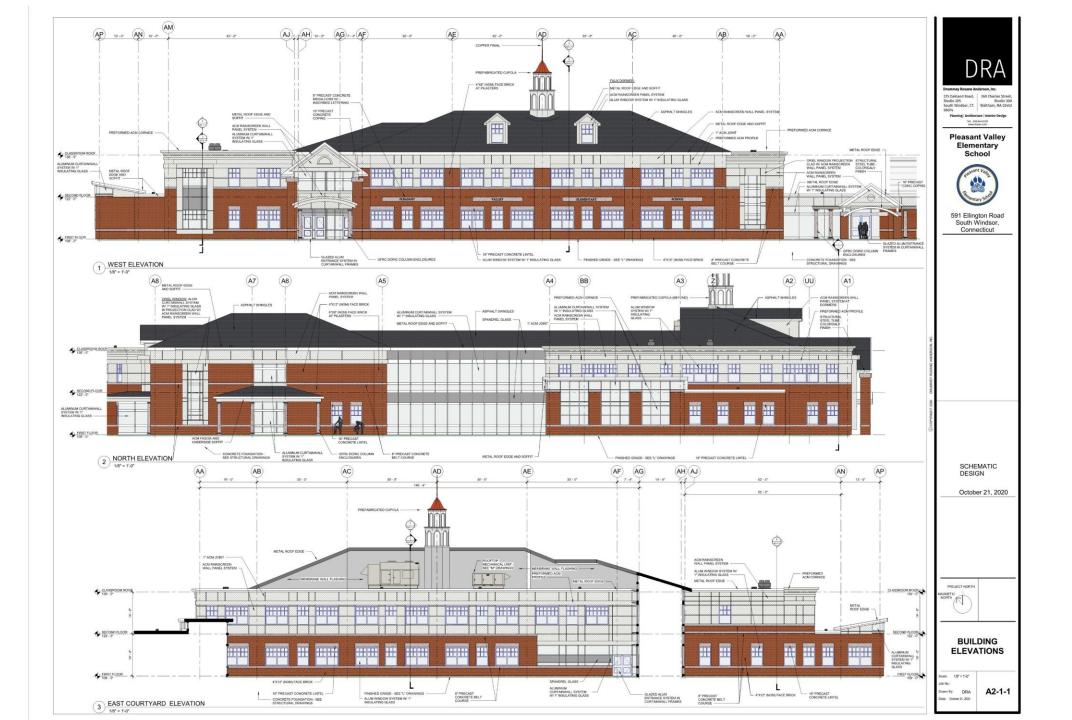






## **ELEVATIONAL STUDIES**





## View East – Gymnasium Entrance





# Aerial View – View Southwest from Ellington Road



## West Elevation - Parent Drop-Off | Visitor Entrance



## West Elevation – Gymnasium Entrance



## East Elevation - Bus Drop-Off



# Aerial View – View North | Gymnasium + Cafeteria



## View North – From Playground to Cafeteria



## View North – From Playground to Gymnasium



### View South - POP / IPOP Entrance





## View South - POP / IPOP Entrance



## View South - POP / IPOP Entrance





### Attachment 1 Electric Vehicle Charging Concepts and Recommendations

### **Executive Summary**

This attachment forwards recommended text changes to the South Windsor Zoning Regulations. These changes are intended to accommodate and promote the ever-increasing adoption of electric vehicles (EVs) in our community.

The Energy Committee recognizes that EV charging involves numerous technical and policy details that need further explanation. Hence, this letter discusses these items and is copied to the Town Council, Economic Development Commission, Board of Education, and Public Building Commission.

The South Windsor Energy Committee delegated research and drafting of this proposal to the following subcommittee and approved its transmittal to the PZC on 12/11/2020.

Stephen Wagner, Energy Committee Chair and PZC Commissioner Hank Cullinane, Energy Committee Steve Lewis, Sierra Club

While there are a number of EVs on the road at this time, this is expected to increase dramatically over the next few years.

- As of June 30, 2020, there are 12,624 EVs registered in Connecticut. Of these, 5,645 were registered in the 18 months ending June 30.
- In support of the state's ambitious climate goals, the Department of Energy and Environmental Protection (DEEP) targets 125,000 to 150,000 EVs on the road by 2025 and 500,000 by 2030.

Achieving these goals as well as promoting and encouraging EV purchases requires a significant increase in EV charging stations (referred to as EV Supply Equipment or EVSE). Zoning regulations can play a role by ensuring that EV charging is a permitted use and by requiring a certain number of EVSE locations in various parking lots for new construction or major renovation.

Regulations should recognize that demand for EV charging is currently small but will grow dramatically over time by initially requiring sufficient wired parking spaces for the long term while requiring actual charging equipment needed for the near term. Wiring is significantly less expensive if done before parking lots are paved and hence would reduce the cost of providing the equipment when demand is larger.

Most EV charging will take place at the owners' homes or workplaces. To support this, DEEP and other sources recommend for new construction and substantial renovation:

- In single-family homes, the garage is the obvious location. Builders should install a circuit sized for a dryer outlet (known as EV Ready Level 2) to minimize the cost of the owner's eventual installation of a charger.
- For multi-unit housing developments, builders should provide EV Ready Level 2 circuits in all garages and 10% of outdoor parking spaces. Of these, 3% of outdoor parking should have EVSE installed. Note that the Energy Committee looked carefully at the various uses in the zoning regulations and, in some cases, recommends less than the 10% number.
- Recognizing that existing multi-unit housing developments and homes are not wired for EV charging, workplace charging will be important for many residents to be comfortable buying an EV. Builders should provide EV Ready Level 2 circuits in 10% of office parking spaces and 10% of other commercial, industrial, and school employee spaces. Of these, 3% of parking should have EVSE installed.
- Note that most retail parking supports customers who, except in restaurants, generally spend insufficient time to benefit from an EV charging service. On the other hand, employees could benefit from the service.
- As with other parking, a certain number of EV charging spaces will need to be ADA van accessible, with wheelchair access to the equipment itself.

There are numerous ways to charge users for the service working through equipment providers. Thus, the cost of electricity and equipment maintenance does not need to be a burden to a facility owner or lessees.

Large destination EV charging facilities are scattered along major corridors and should be permitted in South Windsor.

### **Need for Electric Vehicle Service Equipment**

Enacted in 2008, Connecticut's Global Warming Solution Act (GWSA) requires the state to achieve economy-wide greenhouse gas emissions (GHG) emission reductions of at least 10 percent below 1990 levels by 2020 and 80 percent below 2001 levels by 2050. In 2018, the GWSA was amended by Section 7 of Public Act 18-82, An Act Concerning Climate Change Planning and Resiliency, to include a mid-term GHG reduction target of 45 percent below 2001 levels by 2030. (References 2 and 3)

It is worthwhile to see the current situation. As required under state law, DMV updates its website every six months with the total number of electric vehicles registered in the State of Connecticut, including the total number registered in the state each year. As of July 1, 2020, there were (Reference1):

• Total number registered: 12,624

Total number registered from 1/1/20 to 6/30/20: 1,525

• Total number registered in 2019: 4,120

Total number registered from 1/1/19 to 6/30/19: 2,046

• Total number registered from 7/1/19 to 12/31/19: 2,074

From a zoning perspective, it is important to remember that buildings have a roughly 50-year lifetime before major renovation. Thus, zoning regulations should reflect anticipated conditions relatively far into the future. This is the perspective of the proposed changes to parking requirements to accommodate EV charging for new and renovated buildings. However, to avoid discouraging renovations of old, possibly abandoned buildings, the proposed regulations require EV charging for the addition of 10,000 square feet of floor area or 50 additional parking spaces.

The State of Connecticut has established ambitious goals for carbon emissions as part of its role in addressing climate change (Reference 2). A key part of these goals is reducing and ultimately eliminating carbon emissions from the transportation sector as well as from off-road equipment used in construction, farming, landscaping, and other activities. These goals include:

- Achieving 125,000 to 150,000 EVs on the road by 2025, as one of the several states signing onto the Zero-Emission Vehicle Memorandum of Understanding (ZEV MOU, Reference3).
- Ramping up to 22% of new vehicle sales from 2020 to 2025.
- Having 500,000 EVS on the road by 2030 to meet the state's greenhouse gas (GHG) emissions target.
- Scaling electric vehicle supply equipment (EVSE) deployment to reduce range anxiety and encourage higher EV penetration rates as consumers become more confident in charging accessibility. For the vehicle owner, this means that refueling for an EV should be a reliable and convenient as for an Internal Combustion Engine (gas, diesel) vehicle.

 While accounting for Tesla's proprietary EVSE installations, ensuring sufficient brandagnostic equipment available to the general public. Tesla's equipment, such as the installation near Artisanal Burger Company, provides fast charging to Tesla models only.

#### **Role of Zoning**

Because EV charging requires more time than internal combustion engine (ICE) refueling, charging facilities will be widely distributed to allow vehicle operators to engage in other nearby activities such as home life, shopping, dining, or recreation while their EVs are being charged. Hence, permitting and requiring these facilities will affect virtually all zones of the Town.

Municipalities and the state can require and control installation of EVSE by three mechanisms:

- Building codes: In theory, building codes, if adopted by the state, can require EVSE in all new construction and major renovations. However, the changes in the proposed 2018 International Energy Conservation Code have been challenged on procedural grounds and withdrawn. Hence, building codes are not likely to be an effective mechanism for several years.
- Zoning: Planning and Zoning Commission site plan regulations:
  - Specifically, parking regulations can impose requirements for EVSE on Commercial, Industrial, Office, and Multi-Unit Dwelling sites.
  - PZCs cannot require EVSE or even the necessary wiring and raceways in singlefamily developments since subdivision layout does not affect the interior design of single-family dwellings.
- Town Council action: If the zoning approach is adopted, there are still areas that may require Council action:
  - Adopting an ordinance that new single and two-family houses provide a 40-Ampere, 220-Volt outlet in the garage. (This could be coupled with a requirement that wires from eventual rooftop solar installations can be easily connected to the panel and that panel space be reserved for solar. Depending on the location of the panel, this could require the installation of a spare conduit from the attic to the panel before drywall is installed and space near the panel for the added switching and metering gear.)
  - Requiring new EVSE in single- and two-family homes to have "smart" features that allow utility load management control.
  - Adopting an ordinance that residence associations may not forbid owners from installing EVSE.
  - Requiring the Building Department to use the universal charging permit proposed for statewide use and enter data in a statewide database.

Because parking regulations already exist, zoning is the natural way to implement EVSE requirements for all uses except internal wiring requirements of single- and two-family housing.

#### Types of EVSE

There are three categories of EVSE. This will be important when specifying equipment to be required in various types of development:

- AC Level 1: 20-Ampere, 110 to 120-Volt alternating current (AC) charging off a common electrical outlet, such as used for small kitchen appliances at 1.4-1.9 kW. This is extremely slow and is only necessary to serve some of the oldest EVs on the road. Some Level 2 EVSE provides a Level 1 outlet as an alternative to support these vehicles.
- AC Level 2: 208 to 240 Volts AC, typical in capacity to a clothes dryer outlet. These can charge most EVs overnight or during a work shift. They can also top off or extend the mileage on a partly discharged battery in a reasonable time.
- DC Fast Charging (DCFC), also known as Level 3: 208-480 volt direct current (DC) chargers that can fully load a typical EV in about an hour.

More detail about the three levels is provided by the following table from Reference 2, updated with more current data:

Type of EV Charger	Level 1	Level 2	DCFC
Electrical	110 – 120 Volts AC	208/240 Volts AC	208 – 480 Volts DC
Specifications	12 – 16 Amps	32 Amps	70 – 125 Amps
	20 Amp Circuit	40 Amp Circuit	
Rate of Charge	1 kW	3 kW – 19.2 kW	20 kW +
Mileage Range Per	5	25	250
Hour of Charging			
<b>Estimated Charger</b>	_	\$379 – \$999	\$25,000
Cost			
Estimated	_	\$1,200 – \$2,000	\$75,000 - \$100,000
Installation Costs			
<b>Primary Locations</b>	Residential homes	Residential homes	Highways, interstate
	(mostly single-unit	(single- and multi-unit	transit corridors,
	dwellings)	dwellings),	destination charging
		workplaces, public	locations
		chargers, destination	
		charging locations	

The great majority of installations are likely to be Level 2 equipment. That equipment meets the needs of users who can leave a depleted vehicle for several hours, as well as someone who simply needs to add miles to their battery.

On the other hand, customers might be drawn to a restaurant or coffee shop that offers a DCFC service that can fill up their car while they eat or shop or to a dedicated charging facility similar to a gas station. Such equipment would also be especially useful to EV owners whose apartment or condo development was built before chargers were required since they cannot charge their vehicles at home.

#### **Permitted Use**

EV Charging should be a permitted use in all zones. While requiring EVSE as an accessory use in commercial, industrial, and multi-unit housing developments, the zoning regulations should also allow public EVSE destination installations as a primary use.

DCFC Charging should be limited to non-residential zones and sites, with some flexibility in the case of rural residential zones by special exception. Special exception requirements allow the PZC to consider the impact on nearby properties, among other considerations.

#### Fleet and Farm Installations

Vehicle and equipment fleet and farm owners should be permitted to add EVSE infrastructure to their sites with site plan approval in accordance with business needs. Minimum EVSE count should be based on employee (e.g. office) parking requirements.

#### **Phased Deployment**

When the PZC requires EVSE in a new development, we also need to consider that the demand for this equipment will be less in the short term but increasing over time. While it would be unfair to require a business to install enough equipment to support the anticipated demand in 2030, a partial installation at the start can significantly reduce the cost of responding to increasing demand in later years. Similarly, restricting too many spaces for EV charging during the early years will unfairly impact drivers who do not need this service.

The industry recognizes three stages of installation, and any given site might employ all three:

- EV-Installed Parking Space: Electric Vehicle Supply Equipment or EVSE, either Level 2 or DCFC installed and operational with means to bill electrical usage and other operating costs that are appropriate to the situation.
- EV READY SPACE. A designated parking space with a dedicated branch circuit for EVSE servicing Electric Vehicles at 208/240-Volts at 40-Amperes (Level 2). The circuit should lead to a suitable termination point, such as a receptacle, junction box, or an EVSE, and be accessible to the proposed EV parking spaces. (While developers might contemplate DCFC EV Ready spaces, the high cost of such installations is likely to lead to an all (installed) or nothing approach.)

 EV CAPABLE SPACE. Electrical panel capacity and breaker space to support a minimum 40-ampere, 208/240-volt branch circuit for each EV parking space, and the installation of raceways (conduits).

#### **Required Number of EVSE Spaces**

DEEP recommends that the state building code require a minimum of 10 percent of required parking spaces in new commercial and multi-unit housing developments be pre-wired for Level 2 EVSE (Reference 2) as provided in the following table. Reference 2 seems to indicate that further legislation may be required for individual municipalities to impose these requirements as stretch goals in local building codes. However, zoning commissions can accomplish many of these objectives without further legislation.

Table 6: EV parking space pre-wiring requirements for new construction

Total Number of Parking Spaces	Number of Required Level 2 EV-Ready or
	Charging Spaces
1-9	1
10-25	2
26-50	4
51-75	6
76-100	9
101-150	12
151-200	17
201 and over	10 percent of total*

<sup>\*</sup> The number of spaces has been rounded up to the nearest whole number.

Of these EV Ready Spaces, the following fraction should be required to have EVSE installed (rounded up to the nearest whole number):

Calendar year of site plan application	Fraction of EV Ready Spaces with installed EVSE
2020-2023	3% of parking
2024-2027	7% of parking
2028 and beyond	10% of parking

Note that the DEEP's Reference 2 does not suggest EV Capable Spaces. It focuses only on EV Ready Spaces, with some of them installed. EV Capable Spaces could be an acceptable alternative when the PZC agrees to waive the full requirements for a given application.

Recognizing the ever-increasing capacity of EV batteries, installed EVSE should be sized at the high end of the capacity range for their level.

Without further incentives, the program relies on market forces to lead to the conversion of remaining EV Ready spaces to EV Installed spaces over time.

#### **Tracking EV Penetration in South Windsor**

A universal charging permit form proposed for statewide use is designed the support tracking of EVSE down to the municipal level. The Building Department should adopt this form.

#### **Grid Capacity and the Eversource EV Make Ready Program**

Massive penetration of EV charging in both residential and business areas has the potential to exceed the capacity of the local grid to supply the necessary power during peak periods. This can be mitigated if the utility is given the ability to remotely manage load from these facilities.

Eversource is developing an "Electric Vehicle Make Ready" program to address this need as well as provide incentives for existing multi-unit housing developments to install EVSE. This program is already in place in Massachusetts.

#### **Load Sharing and Time of Day**

Load sharing is a technical strategy that allows a site's electrical capacity to be less than the sum of the individual charging station capacities. If multiple vehicles being charged demand more than the available capacity, individual stations reduce their output. This strategy reduces construction costs and demand-related charges from the utility. As a practical matter, this approach is unlikely to have a negative impact on users because vehicle battery size and state of charge will vary. This should be allowed within limits, such as minimum power level to each vehicle. Load sharing should be limited to office and multi-unit housing locations where users can more easily live with the resulting delays.

Time of day controls are used to schedule charging when other demands on the grid are low. These can also be coupled to time of day electric rates. While not presently available for single-family dwellings, time of day rates are likely to be available in the future. Time of day controls should be limited to housing and facilities that are occupied on a 24-hour basis.

Residents of multi-unit housing should be allowed to optionally defer charging to take advantage of time of day rates.

#### **Existing Buildings (Alterations)**

To bring facilities designed and built prior to the changes in EVSE zoning into conformance with the state's objectives for EV deployment, opportunities must be found to add this equipment. Buildings typically have a 50-year lifespan. They should be retrofitted with EVSE during additions, major building alterations, surface parking, and electrical system upgrades.

This could be tied to the concept of Level 3 Alterations: "where the work area exceeds 50 percent of the original building area, or more than ten parking spaces are substantially modified." (definition taken from Denver EV building code proposal). However, there is a concern that imposing EV charging on a project that merely revamps the interior, as might happen with a new occupant, could discourage bringing idle buildings back into service. The proposed regulations limit the requirement to 10,000 square foot additions to floor area or 50 new parking spaces.

#### **Protection of Equipment**

Charging equipment requires protection from vehicle impact. This can be in the form of curbs, concrete-filled bollards, or wheel stops. Additionally, EVSE installed on sidewalk areas must not impede use of the sidewalk and may therefore require increased sidewalk width. These accommodations may increase the area required for a given parking space beyond that needed for the vehicle and may also impact impervious coverage. For that reason, the commission may wish to waive required parking spaces consistent with the lost parking area. A ratio of 1 waived space for every 5 EV Ready Spaces is suggested.

#### **Signage and Posted Pricing**

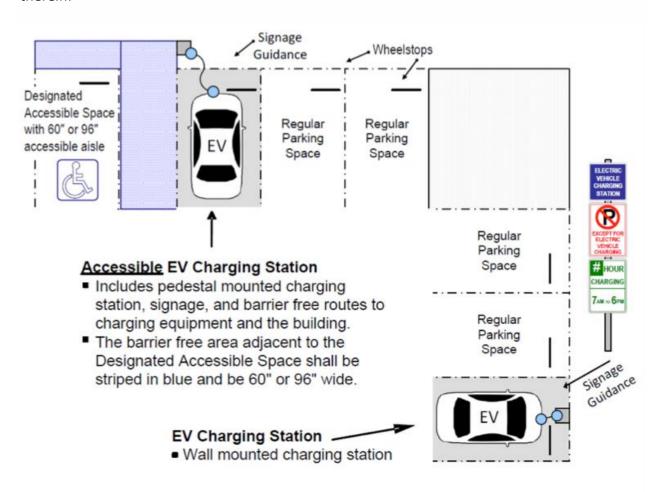
Signs limiting use of each installed EVSE parking space to EV charging, any time limits, applicable ADA restrictions, and any membership requirements (e.g. EVSE service provider, resident, gym, or store membership) should be required. In addition, in the vicinity of a set of EVSE spaces offered to the public, a digital pricing display, visible before entering the parking space, should be required.

Directional signage leading to public EVSE spaces should be permitted in addition to other signage.

#### **ADA Spaces**

There are currently no federal requirements for ADA compliant EV charging spaces. Nonetheless, it is important not to deny EV charging services to community members who meet ADA standards.

In Reference 5, the U.S. Department of Energy provides guidance for the design of ADA compliant EVSE parking spaces. The following figure illustrates some of the concepts discussed therein:



The following table from the 2019 California Building Code (Reference 6) illustrates how that state has set the minimum number of accessible EVSE spaces:

TABLE 11B-228.3.2.1 ELECTRIC VEHICLE CHARGING STATIONS FOR PUBLIC USE AND COMMON USE

TOTAL NUMBER	MINIMUM NUMBER (by	MINIMUM NUMBER (by type) OF EVCS REQUIRED TO COMPLY WITH SECTION 11B-8121									
OF EVCS AT A FACILITY	Van Accessible	Standard Accessible	Ambulatory								
I to 4	1	0	0								
5 to 25	I	1	0								
26 to 50	I	1	1								
51 to 75	1	2	2								
76 to 100	I	3	3								
101 and over	1, plus 1 for each 300, or fraction thereof, over 100	3, plus 1 for each 60, or fraction thereof, over 100	3, plus 1 for each 50, or fraction thereof, over 100								

<sup>1.</sup> Where an EV charger can simultaneously charge more than one vehicle, the number of EVCS provided shall be considered equivalent to the number of electric vehicles that can be simultaneously charged.

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The proposed zoning regulations incorporate a simplified version of this table. When there are a small number of EVSE spaces (say 1 to 4), reserving one for ADA compliance may unfairly restrict access by non-ADA users. In these cases, it is desirable to require a design consistent with van accessible ADA requirements but not restricting the use of the space, assuming the required number of ADA parking spaces are provided elsewhere at the location.

#### **Billing for EVSE use**

While billing is not the purview of the PZC, commissioners should be aware that there are ways to pay for the installation, maintenance, and operation of public and shared EVSE equipment that minimize or eliminate the burden on facility owners. Examples include:

- Charging users by credit card, membership card, key fob, occupant ID card, or similar mechanism. A third party collecting data at the equipment can rely on a common utility account that serves multiple parking spaces.
- In multi-unit housing, the charges can be directed onto the occupant's electric bill. If a garage is physically adjacent to the dwelling, this would be accomplished by wiring through the dwelling's panel.
- Ownership of the equipment by a third party who charges users based on electric usage takes the bookkeeping burden off the site owner. The third party's profit incentive and market perception would drive installation of equipment above the minimums, provided EV Ready Spaces are available.
- In condominiums where a garage is attached to the unit, the electric usage can come directly off the owner's meter. The owner would be required to rent or purchase the charging equipment.
- Facility owners could operate the charging facilities as profit centers. This could provide an additional revenue stream to, say, a restaurant that provides Level 2 or DCFC EVSE.

550

 Regulations could require credit card access in public situations, though further research is required to ensure that such a regulation would eliminate too many competitive equipment suppliers.

#### References:

- 1. <a href="https://portal.ct.gov/DMV/News-and-Publications/News-and-Publications/Electric-vehicle-stats">https://portal.ct.gov/DMV/News-and-Publications/News-and-Publications/Electric-vehicle-stats</a>
- "Electric Vehicle Roadmap for Connecticut, A Policy Framework to Accelerate Electric Vehicle Adoption," Connecticut Department of Energy and Environmental Protection, 2020.
- 3. State Zero-Emission Vehicle Programs—Memorandum of Understanding. NESCAUM. Signed October 24, 2013. Retrieved March 3, 2020 from <a href="https://www.nescaum.org/documents/zev-mou-10-governors-signed-20191120.pdf/">https://www.nescaum.org/documents/zev-mou-10-governors-signed-20191120.pdf/</a>.
- 4. Conn. Gen. Stat. § 22a-200a.
- 5. "ADA Requirements for Workplace Charging Installation: Americans with Disabilities Act Requirements to Consider for Workplace Charging Installation", U.S. Department of Energy, WPCC\_complyingwithADArequirements\_1114.pdf, 2014.
- 6. 2019 California Building Code, Title 24, Part 2, Volume 1, Chapter 11B. <a href="https://codes.iccsafe.org/content/CABCV12019/chapter-11b-accessibility-to-public-buildings-public-accommodations-commercial-buildings-and-public-housing">https://codes.iccsafe.org/content/CABCV12019/chapter-11b-accessibility-to-public-buildings-public-accommodations-commercial-buildings-and-public-housing</a>

Abbreviations	GWSA – Global Warming Solutions Act
	HOV – high occupancy vehicle
While not all of these abbreviations are used in the	ICC – International Code Council
present document, readers may find them elsewhere	ICE – internal combustion engine
, , , , , , , , , , , , , , , , , , , ,	IECC – International Energy Conservation Code
AC – alternating current	kWh – kilowatt-hour
ACT – Advanced Clean Trucks Regulations	LED – light-emitting diode
ADA – Americans with Disabilities Act	LMI – low- and moderate-income
AFLEET – Alternative Fuel Life-Cycle Environmental	Low-No – Low- or No-Emission Grant program
and Economic Transportation	MOR-EV – Massachusetts Offers Rebates for EVs
ATV – alternative technology vehicle	MSRP – manufacturer suggested retail price
BAU – business as usual	MUD – multi-unit dwelling
BESH – Basic Electric Service Hourly	MY – model year
BEV – battery electric vehicle	NAAQS – National Ambient Air Quality Standards
BNEF – Bloomberg New Energy Finance	NDEW – National Drive Electric Week
CAA – Clean Air Act	NESCAUM – Northeast States for Coordinated Air
CAFE – Corporate Average Fuel Economy	Use Management
CALGreen – California Green Building Standards	NHEC – New Hampshire Electric Co-op
Code	NHTSA – National Highway Traffic Safety
CARA – Connecticut Automotive Retailers	Administration
Association	NOx – nitrogen oxides
CARB – California Air Resources Board	NREL – National Renewable Energy Laboratory
CHEAPR – Connecticut Hydrogen and Electric	NYSERDA – New York State Energy Research and
Automobile Purchase Rebate	Development Authority
CO <sub>2</sub> – carbon dioxide	O&M – operation and maintenance
C-PACE – Commercial Property Assessed Clean	OCPI – Open Charge Point Interface
Energy	OCPP – Open Charge Point Protocol
CSE – Center for Sustainable Energy	OEM – original equipment manufacturer
CT – Connecticut	Open ADR – Open Automated Demand Response
CVRP – California Clean Vehicle Rebate Project	OSCP – Open Smart Charge Protocol
DAS – Connecticut Department of Administrative	PG&E – Pacific Gas and Electric Company
Services	PHEV – plug-in hybrid electric vehicle
DCDE – Drive Change. Drive Electric	PM-2.5 – particulate matter 2.5
DCFC – direct current fast charger/charging	PUC – public utility commission
DEEP – Connecticut Department of Energy and	PURA – Public Utilities Regulatory Authority
Environmental Protection	RMI – Rocky Mountain Institute
DER – distributed energy resource	SDG&E – San Diego Gas and Electric Company
DMV – Connecticut Department of Motor Vehicles	SIR – Savings-to-investment ratio
DOE – U.S. Department of Energy	SO <sub>2</sub> – sulfur dioxide
DOT – Connecticut Department of Transportation	SUV – sport utility vehicle
EDC – electric distribution company	TOD – transit-oriented development
EPA – U.S. Environmental Protection Agency	TCI – Transportation and Climate Initiative
EV – electric vehicle	TOU – time-of-use
EVSE – electric vehicle supply equipment	UC Davis – University of California Davis
FCEV – fuel cell electric vehicle	V2B – vehicle-to-building
FHWA – Federal Highway Administration	V2G – vehicle-to-grid
FTA – Federal Transit Administration	VIN – vehicle identification number
GBTA – Greater Bridgeport Transit Authority	VOC – volatile organic compound
GC3 – Governor's Council on Climate Change	VMT – vehicle miles traveled
GHG – greenhouse gas	VW – Volkswagen
	ZEV – zero-emission vehicle
GIS – geographic information system	
GMP – Green Mountain Power	ZEV MOU – Zero-Emission Vehicle Memorandum of
GPS – global positioning system	Understanding
GREET – Greenhouse gases, Regulation Emissions,	
and Energy use in Transportation	

#### Attachment 2

#### **Proposed Text changes to the South Windsor Zoning Regulations**

#### 3.1 Residential Zone Requirements

3.1.2.I [New] Electric Vehicle Supply Equipment (EVSE) is permitted as an accessory use. See Appendix H Electric Vehicle Supply Equipment.

#### 3.2 Residential Zones (RR, AA and A)

3.2.1.H [New] Electric Vehicle Supply Equipment (EVSE) is permitted as an accessory use. See Appendix H Electric Vehicle Supply Equipment.

#### 3.4 Multifamily Residential Zone (MF-A or MF-AA)

- 3.4.2.B [New] Electric Vehicle Supply Equipment (EVSE) is permitted as an accessory use. See Appendix H Electric Vehicle Supply Equipment.
- 3.4.7.G [New] EVSE Ready Spaces and EV Installed Spaces shall be provided as described in 6.4.10. Minimum Number of EVSE Parking Spaces and Appendix H Electric Vehicle Supply Equipment. All garages and assigned covered spaces shall be wired as EV Ready Spaces.

#### **4.1 Commercial and Industrial Use Regulations**

4.1.3 [Add text] Electric Vehicle Supply Equipment (EVSE) is permitted as an accessory use; see Appendix H Electric Vehicle Supply Equipment.

#### 4.2 Buckland Road Gateway Development Zone

- 4.2.5.F [New] Electric Vehicle Supply Equipment (EVSE) is permitted as an accessory use. See Appendix H Electric Vehicle Supply Equipment. EVSE is permitted as a primary use by Special Exception.
- 4.2.15.A.2.h [Add text] EVSE Ready Spaces and EV Installed Spaces shall be provided as described in 6.4.10. Minimum Number of EVSE Parking Spaces and Appendix H Electric Vehicle Supply Equipment. All garages shall be wired as EV Ready Spaces.
- 4.2.11.C.2.e. [New] EVSE Ready Spaces and EV Installed Spaces shall be provided as described in 6.4.10. Minimum Number of EVSE Parking Spaces and Appendix H Electric Vehicle Supply Equipment.

#### Section 4.6 Route 5 Travel Zone (TS)

#### 4.6.3 Specific Design Standards & Use Restriction/Guidelines

9. ... motor vehicle refueling/re-energizing (e.g. Electric Vehicle Supply Equipment) ...

#### 5.6 Center Core Overlay Zone

5.6.9.C.6 [New] EVSE Ready Spaces and EV Installed Spaces shall be provided as described in 6.4.10. Minimum Number of EVSE Parking Spaces and Appendix H Electric Vehicle Supply Equipment. Equipment locations shall be similar to the location for streetlights illustrated in Section 5.6.9.B. In addition, all streetlights shall have EV Level 1 outlets on the pole.

5.10.2.B.22 [New or add to 5.10.2.B.15] EVSE Ready Spaces and EV Installed Spaces shall be provided as described in 6.4.10. Minimum Number of EVSE Parking Spaces and Appendix H Electric Vehicle Supply Equipment. All garages and assigned covered spaces shall be wired as EV Ready Spaces.

# **ARTICLE 3 RESIDENTIAL ZONES**

## **Section 3.1** Residential Zone Requirements

## 3.1.1 Permitted Uses, Impervious Coverage and Other Provisions

Uses within residential zones shall be governed by Table 3.1.1A. For uses requiring a Special Exception, see Section 8.4 Special Exception Standards and Procedures.

Table 3.1.1A - Permitted Uses, Impervious Coverage and Other Provisions									
P = Permitted SE = Special Exception Blank = Not Permitted	AA-30 A = A-	Zones  RR = Rural Residential  AA-30 = Limited Residential  A = A-40, A-30, & A-20 Residential  MF = Multifamily				Additional Provisions			
Use	RR	AA-30	Α	MF					
Residential									
Accessory Apartments	SE	SE	SE			See Article 7 Special Regulations.			
Agri-Tourism	SE		SE*			*Limited to A-40 zones. See Section 5.9			
Assisted Living Facilities	SE	SE	SE	SE		See Article 7 Special Regulations.			
Bed and Breakfast (for not more than 6 guests)	SE		SE		10%	Provided that such use is served by public sewer and water facilities. Meals served shall be limited to breakfast.			
Elderly Housing	SE	SE	SE		40%	See Article 7 Special Regulations.			
Household Pets	P	P	P	P		Excludes kennels			
Horses and ponies for personal use, to include large domestic animal pets (3 or fewer)	P	P	P			See Article 7 Special Regulations.			
Horses and ponies for personal use, to include large domestic animal pets (more than 3)	SE	SE	SE			See Article 7 Special Regulations.			
In-Law Apartment	P	P	P			See Article 7 Special Regulations. A Special Exception is required in the event that any waiver is requested relative to the criteria of 7.1.3.A.			
Multifamily Dwelling				SE		Accessory uses to dwellings as determined and approved by the Commission and which are intended and designed for the maintenance or operation of the property and/or the use of its residents are permitted.			

Table 3.1.1A - Permitted Uses, Impervious Coverage and Other Pro	visions

P = Permitted SE = Special Exception Blank = Not Permitted	AA-30 A = A-	Zo Rural Resid = Limited I 40, A-30, & //ultifamily	Resident		Impervious Coverage	Additional Provisions
Use	RR	AA-30	Α	MF		
Multifamily Assisted Housing		SE				See Article 7 Special Regulations
Single-family Dwelling	P	P	P			Accessory uses to dwellings as determined and approved by the Commission and which are intended and designed for the maintenance and/or operation of the common interest community-owned land and/or the use of its residents are permitted.
Two Family Dwelling converted from single-family	SE		SE			Provided that:  The building shall have been constructed prior to 1940.  The lot has an area of not less than 30,000 sq. ft., and sufficient area to provide for sub-surface disposal of additional sewage.  The external appearance and general character of the building as a single-family dwelling shall be preserved.  Family dwelling units shall conform to the minimum requirements listed in Table 3.1.2A Residential Area, Density and Dimensional Requirements.

## **Public and Semipublic**

Cemeteries	SE			5	50%	Provided that no activity shall be conducted which is hazardous or dangerous to persons or property outside of the lot on which the activity is conducted
Day Care Centers	SE					See Article 7 Special Regulations.
Educational Institution: For Profit	SE	SE	SE	3	35%	Provided that:  No activity shall be conducted that is hazardous or dangerous to persons or property outside of the lot on which the activity is conducted.  No activity is carried on that results in objectionable noise audible off the premises.  The external appearance and general character of the building as a single-family dwelling shall be preserved.

 ${\bf Table~3.1.1A~-\,Permitted~Uses,\,Impervious~Coverage~and~Other~Provisions}$ 

P = Permitted SE = Special Exception Blank = Not Permitted	AA-30 A = A-	Zones RR = Rural Residential AA-30 = Limited Residential A = A-40, A-30, & A-20 Residential MF = Multifamily			Impervious Coverage	Additional Provisions	
Use	RR	AA-30	Α	MF			
Educational Institution: Non-Profit or Government	SE	SE	SE		RR-50% AA, A-35%	Operated by a duly incorporated non-profit body or government unit	
Essential Community Services	SE	SE	SE	SE	50%		
Golf Courses	SE				10%	See Article 7 Special Regulations.	
Hospitals, Sanitariums, Convalescent Homes	SE				50%	Except for contagious, mental, alcoholic, and drug cases Provided that: The lot area is not less than 1/10 acre for each person accommodated, including patients and employees. Such uses are served by the public sewer and water facilities.	
Municipal Facilities and Uses	SE	SE	SE	SE	50%		
Public Utility Buildings and Structures, e.g., substations, transform- ers, water supply reser- voirs, wells, water tow- ers and water treatment facilities	SE	SE	SE		50%	Provided that: There is no service yard or outside storage of supplies. Buildings and/or grounds conform to the general character of the neighborhood.	
Recreational Areas, Parks, Playgrounds operated by the Town of South Windsor	SE	SE	SE		50%		
Recreational Facilities, forest or wildlife reser- vation, park or play- ground not operated for profit	SE	SE	SE		50%	Operated by a duly incorporated non-profit body or government unit	
Religious Institutions - churches, temples and other recognized places of worship	SE	SE	SE		RR-50% AA, A-35%	Operated by a duly incorporated non-profit body or government unit	
Solar Energy, Roof Mounted	P	P	P	P		See Article 7, Special Regulations	

Table 3.1.1A - Permitted Uses, Impervious Coverage and Other Provisions									
P = Permitted SE = Special Exception Blank = Not Permitted	AA-30 A = A-	Zol Rural Resid = Limited I 40, A-30, & Multifamily	Resident		Impervious Coverage	Additional Provisions			
Use	RR	AA-30	Α	MF					

### **Commercial Uses**

Agriculture, forestry, truck or nursery gardening, including green- houses incidental thereto	P					Not including veterinary hospitals, veterinary kennels, commercial kennels, animal boarding homes, livery or boarding stable. Excludes swine and animals raised for pelts except for domestic use. See Section 7.12 Horses/Ponies and Home Animal Agriculture for Home Animal Agriculture and Commercial Animal Agriculture regulations.
AC Level 1 and AC Level 2 Electric Vehicle Charging Equipment (EVSE)	SE					As a primary use (destination charging) for sale of EV Charging services to the public, similar in intent to internal combustion engine fueling (e.g. gasoline or diesel).  See Appendix H – Electric Vehicle Supply Equipment
Farms	P		P			Supply Equipment
Farm Stands	SE		SE			See Article 7 Special Regulations.
Home Occupations, Home Office, Professional Office (Major)	SE		SE			See Article 7 Special Regulations.
Home Occupations, Home Office, Professional Office (Minor)	Р	Р	P	Р		See Article 7 Special Regulations.
Offices - professional, commercial and business	SE		SE		50%	See Article 5.3 Special Regulations.
Solar Energy System, Large	SE					See Article 7, Special Regulations
Solar Energy System, Small	SE		SE**		20%	See Article 7, Special Regulations
Stables, Barns, Riding Academies	SE		SE**		20%	See Article 7 Special Regulations.

## ARTICLE 4 COMMERCIAL AND INDUSTRIAL ZONES

## **Section 4.1 Commercial and Industrial Use Regulations**

#### **4.1.1 Permitted Uses**

Uses within Commercial and Industrial Zones shall be governed by Table 4.1.1A. See Section 4.2 for use provisions relating to the Buckland Road Gateway Development Zone (GD); Section 4.3 for the Designed Commercial Zone (DC); and Section 4.4 for the I-291 Corridor Development Zone (CD).

**Table 4.1.1A Permitted Commercial and Industrial Uses** 

SE = Special Exception SP = Site Plan ZP = Zoning Permit Blank = Not Permitted	Zones  DC = Design Commercial  GC = General Commercial  I = Industrial  RC = Restricted Commercial  RO = Restricted Office  TS = Route 5 Travel Services						Additional Provisions
Use	DC	GC	I	RC	RO	TS	
Residential		SP/SE*	SP/SE*	SP/SE*			A single residential dwelling by the owner of the facility is allowed in conjunction with a permitted commercial use. The residence may be either a dwelling unit contained within the commercial facility itself, or may be a separate free-standing single-family dwelling that otherwise meets all of the requirements of the underlying zone.  * An owner can request either the business/residential use be a rental property for properties developed prior to 2019 provided the owner lives on site or operates the business. No more than 10% of properties within 1,000 feet can contain such rentals.
Assisted Living	SE	SE		SE	SE		See Article 7 Special Regulations.
Duplex		SE					See Article 7 Special Regulations.
Horses and ponies for personal use		SP		SP	SP		See Article 7 Special Regulations.
Multi-family residential		SE					See Section 5.10 – Specific Requirements for a Sullivan Avenue Mixed-Use Development in the GC
Public and Semipublic							
Hospitals, Sanitariums, Convalescent Homes		SE					Except for contagious, mental, alcoholic, and drug cases provided that:  The lot area is not less than 1/10 acre for each person accommodated, including patients and employees;  Such uses are served by the public sewer and water facilities; and  50% impervious coverage

Fraternal organizations and membership clubs operated as a nonprofit activity			SE			
Municipal Facilities and Uses	SE	SE	SE	SE	SE	

**Table 4.1.1A Permitted Commercial and Industrial Uses** 

SE = Special Exception SP = Site Plan ZP = Zoning Permit Blank = Not Permitted	GC = C $I = Index$ $RC = R$ $RO = R$	General C ustrial Restricted Restricted	Zonmercia Commercia Commercia Commercia Office ravel Servi	l l cial	Additional Provisions		
Use	DC	GC	I	RC	RO	TS	
Commercial Uses							
Agriculture (e.g. forestry operation, cultivated lands, animals)	P	P	P	P	P	P	Clearing of ½ acre of land requires PZC approval.
Adult-Oriented Businesses		SE					See Article 7 Special Regulations.
Alcoholic Liquor Stores	SP	SP		SP			
Alcoholic beverage sales for consumption on the premises of hotels, restaurants, taverns, grills and cafes	SP	SP	SE*	SP			*Industrial zone – accessory to a permitted recreational use or manufacturing use
Alcoholic liquor sales as part of a drug store or grocery store	SP	SP		SP			
Amusement - theaters, moving picture houses, assembly halls, billiard and pool rooms, bowling alleys, and similar amusement enterprises		SP	SE*				Excluding shooting galleries, freak shows, mechanical rides and similar enterprises * Industrial zone in conjunction with permitted indoor recreational use. See Article 7 Special Regulations
Automobile retail sales, new and used		SE	SE*				* Maximum cars offered for sale is four (4)
Automobile service and repair			SP				
Automobile wholesale		SE					
Automobile service stations, fuel and repair		SE					See Article 7 Special Regulations.
Automotive fuel	SP						Only when accessory to a retail sales and inventory directly related thereto facility that has a minimum gross floor area of 50,000 sq ft  Commission may determine hours of operation.
Brewery / Distillery			SP				Accessory uses and incidental sales (e.g. tasting rooms) subject to criteria in Section 4.5.3 Accessory Uses. Parking is subject to PZC approval.
Beverage Stores, quick service; e.g. coffee shop						SP	
Building and landscape materials sales and storage including lumber yards and construction equipment			SE				Excluding the storage or fabricating of structural steel and heavy concrete products. Primary building shall be minimum 2,000 sq ft (excluding greenhouses). Except plant materials, outdoor storage/sales area shall not be visible from a public street.
Convenience Stores						SP	

**Table 4.1.1A Permitted Commercial and Industrial Uses** 

SE = Special Exception SP = Site Plan ZP = Zoning Permit Blank = Not Permitted	Zones  DC = Design Commercial GC = General Commercial I = Industrial RC = Restricted Commercial RO = Restricted Office TS = Route 5 Travel Services						Additional Provisions
Use	DC	GC	I	RC	RO	TS	
Convention Facilities	SE						
Day Care Facilities	SE	SE	SE	SE	SE		See Article 7 Special Regulations.
Dog Grooming Facilities		SE	SE	SE			See Article 7 Special Regulations for Dog Grooming Facilities in the Industrial Zone
Dry cleaning, laundry, and dyeing establishments		SP					
AC Level 1, AC Level 2, and DC Fast Charging Electric Vehicle Charging Equipment (EVSE)	SE	SE	SE	SE	SE		As a primary use (destination charging) for sale of EV Charging services to the public, similar in intent to internal combustion engine fueling (e.g. gasoline or diesel).  See Appendix H – Electric Vehicle Supply Equipment
Entertainment (live) at hotels and restaurants, taverns, grills and cafes	SP	SP	SE*				*Industrial zone in conjunction with permit- ted indoor recreational use. See Article 7 Special Regulations
Equipment sales, service and rentals, including farm equipment		SP	SE				
Financial Services, institutions and agencies	SP	SP	SP	SP		SP	
Fitness Facilities		SP	SE	SP		SP	See Article 7 Special Regulations for indoor recreational facilities
Freezer lockers and incidental processing of food for human consumption		SP					
Garages - public		SP		SE			
Hotels (and motels)	SP	SP		SP		SP	
Hotels, exclusive of entertainment		SP		SP			
Manufacture of bricks, cement products, tile and terra cotta			SE				
Manufacture, processing, packaging and assembly of components or goods			SP				
Microbrewery, Brewpub		SP		SE			No more than 15,000 barrels manufactured per year; wholesale and retail sales allowed; tasting rooms allowed; outside tasting allowed in conformance with Section 7.15 Outdoor Dining. Hours of operation may be determined by the PZC

Mobile Food Vendor	ZP	ZP	ZP	ZP	ZP	Mobile food vendors are permitted in these zones without a permit provided that all of the following criteria are met:  1. Written permission from the property owner;  2. Adequate room for vehicles to pull off safely;  3. A maximum of 12 sq. ft. of free-standing signage;  4. Vendors shall not be located within public rights of way;
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**Table 4.1.1A Permitted Commercial and Industrial Uses** 

SE = Special Exception SP = Site Plan ZP = Zoning Permit Blank = Not Permitted	Zones  DC = Design Commercial GC = General Commercial I = Industrial RC = Restricted Commercial RO = Restricted Office TS = Route 5 Travel Services						Additional Provisions
Use	DC	GC	I	RC	RO	TS	
							<ul> <li>5. All facilities and equipment used by vendor must be portable and must be removed from the site by 9:00 p.m.</li> <li>6. Connections to external utilities are not permitted.</li> <li>7. Vendors must comply with health and safety regulations of the Town of South Windsor and the State of Connecticut.</li> <li>8. Vendors shall keep the area of operation free of debris and shall clean the area thoroughly upon ceasing operations each day. At least 1 trash container must be provided for use by patrons in conjunction with mobile food vendor.</li> </ul>
Mortuaries, funeral and internment services		SP		SP			May have living quarters containing a dwelling unit of at least 700 square feet of living space and at least 2 rooms, exclusive of the bathroom, to be occupied by a person, together with his family, who is the owner, manager, caretaker, or janitor, residing in the same building.
Multi-family residential		SE					See Section 5.10 – Specific Requirements for a Sullivan Avenue Mixed-Use Development in the GC zone
Motor vehicle refueling / re-energizing stations						SP	
Offices - professional, commercial, corporate and business	SP	SP	SP	SP	SP	SP	
Personal Services Shops	SP	SP		SP			Limited to barber shops, beauty shops, shoe repair shops, tailoring and dressmaking shops, tanning salons, clothes rental stores, and similar establishments. Tattoo parlors are not considered a personal service shop.
Pharmacy	SP	SP		SP		SP	Including pharmacy with drive thru.
Petroleum Product Bulk Storage			SE				
Plumbing, heating, electrical, mechanical industrial and general contracting establishments			SP				May include showrooms, storage and maintenance of heavy construction equipment
Printing and publishing, graphic arts processes, sign shop painting		SP	SP				
Radio and television studios and transmitters, communication towers, multimedia stations		SP					

**Table 4.1.1A Permitted Commercial and Industrial Uses** 

SE = Special Exception SP = Site Plan ZP = Zoning Permit Blank = Not Permitted	Zones  DC = Design Commercial GC = General Commercial I = Industrial RC = Restricted Commercial RO = Restricted Office TS = Route 5 Travel Services						Additional Provisions
Use	DC	GC	I	RC	RO	TS	
Recreational Activities - indoor	SP	SP	SE*				*See Article 7 Special Regulations.
Recreational Facilities – outdoor		SE	SE*				*See Article 7 Special Regulations
Research Laboratories			SP				
Restaurants, including fast food	SP	SP		SP		SP	
Restaurants, exclusive of entertainment		SP		SP			
Retail Establishments with high turnover (frequent customer arrivals / departures)						SP	
Retail sales and inventory directly related thereto	SP	SP		SP			Retail sales and high-turnover uses with frequent customer arrivals and departures are prohibited.  Retail sales associated with a club membership format are permitted and shall not be considered a wholesale sales use.  Repairing and fabricating incidental to a retail store are permitted as an accessory use.  Tire and battery repair and replacement as an accessory use to retail sales is permitted in the DC zone only.
Riding Academies, Barns and Stables		SP					
Solar Energy, Roof Mounted	P	P	P	P	P	P	See Article 7, Special Regulations
Solar Energy System, Large		SE	SE				See Article 7, Special Regulations
Solar Energy System, Small		SP	SP				See Article 7, Special Regulations
Solid waste, recycling, transfer station facilities			SE				Including storage and maintenance of vehicles and refuse containers, but excluding dumping and/or disposal on-site of waste originating off-site
Training Facilities		SE	SE	SE			
Truck and Freight Terminals			SE				With the right to service, maintain and repair motor vehicles incidental to the afore- said use
Veterinary Hospitals and Boarding Kennels			SE				For the treatment and boarding of small animals, primarily cats and dogs, with all facilities housed inside a building with a limited outside fenced area for exercising and training with necessary office and service space

**Table 4.1.1A Permitted Commercial and Industrial Uses** 

SE = Special Exception SP = Site Plan ZP = Zoning Permit Blank = Not Permitted	Zones  DC = Design Commercial  GC = General Commercial  I = Industrial  RC = Restricted Commercial  RO = Restricted Office  TS = Route 5 Travel Services						Additional Provisions
Use	DC	GC	I	RC	RO	TS	
Warehouses and Distribution Centers			SP				
Wholesale sales and inventory directly related thereto			SE				
Wholesale sales and inventory directly related thereto for the public		SP					

Note that in the GC Zone, buildings in excess of 40,000 square feet, parking areas in excess of 50 cars, and non-bank drive-in facilities require a special exception approval.

## Section 6.4 Parking and Access – Off-street Parking and Loading

#### Section 6.4 Parking and Access - Off Street Parking and Loading

#### 6.4.10. Minimum Number of EVSE Parking Spaces

- a. In all districts, the minimum number of parking spaces shall be provided in accordance with the following tables and apply to new construction, an increase of 10,000 square feet of floor space, or expansion of 50 parking spaces. When a change of use is proposed that requires additional EVSE spaces, the Commission may consider the extent of renovations and new or additional construction in determining whether to require the additional spaces. See Appendix H for detailed requirements.
- b. EV Capable Spaces may be installed in addition to the required EV Ready and EV Installed spaces.
- c. For each five or more EV Ready Spaces at a site, the Commission may reduce total required parking by 1 space.
- d. Table 6.4.10A defines the generally required EV Ready Spaces in each site. Tables 6.4.10D and E establish the applicability of Table 6.4.10A to specific uses.
- e. Of these EV Ready Spaces, Table 6.4.10B determines the minimum number which shall be EV Installed Spaces.
- f. Handicapped Accessible vehicle charging stations shall be provided based on Table 6.4.10C. See Appendix H for information regarding Accessible EV Charging Station design.

Table 6.4.10A Level 2 EV Ready parking space wiring requirements

<b>Total Number of Parking Spaces*</b>	Number of Required Level 2 EV-Ready or Charging Spaces**
1-9	1
10-25	2
26-50	4
51-75	6
76-100	9
101-150	12
151-200	17
201 and over	10 percent of total

<sup>\*</sup> Truck and equipment parking spaces are not included in the above calculation.

<sup>\*\*</sup> The number of spaces has been rounded up to the nearest whole number.

**Table 6.4.10B Required EV Installed Spaces** 

Calendar year of site plan application	EV Ready Spaces with installed EVSE*
2021-2023	3% of required parking
2024-2027	7% of required parking
2028 and beyond	10% of required parking
* Rounded up to the nearest whole number.	

Table 6.4.10C ADA Requirements for EV Charging

	Number of EV Spaces required to comply with ADA requirements									
Total number of EVSE Spaces at site	Van Accessible Restricted to EV Charging (Note 1)	Van Accessible Restricted to EV Charging and Handicapped Parking								
1 to 4	1	0								
5 to 25	1	1								
26 to 50	0	2								
51 to 75	0	3								
76 to 100	0	4								
101 or more		4 plus 1 for each 60 or fraction thereof over 100								

Note 1: In order to ensure that all EV users have access to charging equipment if only 1 to 4 EVSE stations are installed, the van accessible space shall meet the van accessible design requirements, including wheelchair aisle and ramp providing access to EVSE, but not be restricted to handicapped parking, provided sufficient handicapped restricted spaces are provided in accordance with Paragraph 6.4.4.G.

Table 6.4.10D Minimum Required EVSE Parking Spaces – Residential Uses

Use – Residential	Minimum Required EV Charging Facilities
Multi-family Dwellings and	See Tables 6.4.10A, 6.4.10B, and 6.4.10C.
Multi-family Dwellings / SAMUD-OZ	
Assisted Living	All assigned covered or garage parking spaces
Elderly Housing	shall be provided Level 2 EV Ready circuits
Independent Living	and outlets. Remaining parking spaces are
	used in Tables 6.4.10A, 6.4.10B, and 6.4.10C
	to determine the shared EV Ready and EV
	Installed Spaces. [Needs further discussion
	with building department regarding garages.]
	MUD management shall contract with an
	EVSE supplier to provide chargers and means
	for billing usage to residents.
	If garages are adjacent to the associated
	dwelling, connection may be through the
	dwelling panel and meter. MUD management
	may require the occupant to purchase or lease
	approved EVSE.

Table 6.4.10E Minimum Required Parking Spaces – Commercial and Industrial Uses

Use	Minimum Required Parking Spaces
Bar, Nightclub, Lounge Bowling Alley Business Offices Hotel, Motel, Tourist Home Hospital, Sanitarium, Convalescent or Nursing Home Industrial and Manufacturing Library Places of Assembly, Amusement, Recreation, and Education Research Restaurants, Taverns, Cocktail Lounges Theater	See Tables 6.4.10A, 6.4.10B, and 6.4.10C.
Park and Ride Lots Charging Lots Municipal parks and recreation	See Tables 6.4.10A, 6.4.10B, and 6.4.10C. In addition, all light poles may have EV Level 1 outlets.  None required. Allowed as an accessory use.
areas Retail Stores Car Wash Fast Food Financial Institution Library Schools Medical and Dental Office Personal Service Shops Day Care and Pre-Schools Warehouse	Calculation based on employee parking estimated at the time of site plan application. See Tables 6.4.10A, 6.4.10B, and 6.4.10C.
Shopping Center  Church, Synagogue	Calculation based on sum of requirements for various uses therein (e.g. retail stores, restaurants, etc.) with rounding applied to sum. See Tables 6.4.10A, 6.4.10B, and 6.4.10C.  Recommended. Calculations should consider anticipated parking lot occupancy when religious services are not taking place. See Tables 6.4.10A, 6.4.10B, and 6.4.10C.

## **Section 11.8 APPENDIX H Electric Vehicle Supply Equipment (EVSE)**

#### **11.8.1. Purpose**

The purpose of this appendix is to provide for and promote the use of Electric Vehicles (EVs), subject to reasonable conditions that will protect the environment, public health, safety, and welfare. Because EV charging requires more time than internal combustion engine (ICE) refueling, charging facilities will be widely distributed to allow vehicle operators to engage in other nearby activities such as home life, shopping, dining, or recreation while their EVs are being charged.

#### 11.8.2. Electric Vehicle Definitions [should these be in the definitions section?]

1. **ELECTRIC VEHICLE:** A motor vehicle capable of being driven by a battery powered electric motor.

#### 2. ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) or EV CHARGING STATION:

The conductors, including the ungrounded, grounded, and equipment grounding conductors, and the Electric Vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the Electric Vehicle.

- a. **AC LEVEL 1 EVSE:** 110 to 120-Volt, alternating current (AC) EVSE connected to a 20 Ampere electrical outlet.
- b. AC LEVEL 2 EVSE: 208 to 240 Volts AC EVSE connected to a 40 Ampere circuit.
- c. **DC FAST CHARGING (DCFC) EVSE:** also known as **LEVEL 3 EVSE**: 208-480 Volt direct current (DC) chargers with 70 Ampere or higher capacity.

#### 3. ELECTRIC VEHICLE PARKING SPACES

- a. **EV INSTALLED SPACE:** A designated parking space with Electric Vehicle Supply Equipment (EVSE) installed and operational.
- b. **EV READY SPACE:** A designated parking space which is provided with a minimum AC Level 2 EVSE or higher capacity sufficient to serve DC Rapid Charge EVSE.
- c. **EV CAPABLE SPACE:** Electrical panel capacity, breaker space, and raceways or conduits to support eventual installation of AC Level 2 EVSE. .

#### 11.8.3. Provisions

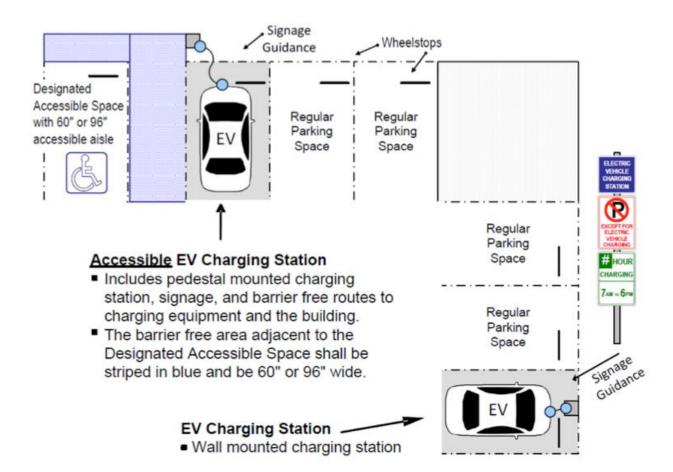
- 1. AC Level 1 and AC Level 2 Electric Vehicle Supply Equipment (EVSE) shall be permitted as an accessory use by right in all zoning districts and by Special Exception as primary use. Direct Current Fast Charging (DCFC or Level 3) EVSE are permitted as an accessory use and by Special Exception as primary use in all Commercial and Industrial Zones as defined in Article 4 of these regulations. Site plan approval is required for all uses except Single and Two-Family Dwellings.
- 2. The sale of electric energy through EVSE to the public or to appropriately restricted occupants, guests, customers, members, etc. is permitted in all zones except at one- and two-family dwellings. Any access restrictions shall be incorporated in the site plan and approved by the Commission.
- 3. EVSE connections shall meet current standards designed to be capable of serving all brands of EVs. Support of AC Level 1 at AC Level 2 stations is optional. Proprietary EVSE systems capable of serving only specific vehicle brands are permitted where otherwise allowed but may not be used to meet the minimum EV parking space requirements of Section 6.4.10.
- 4. The main electrical switchgear shall be installed with sufficient space and capacity to support 10%

of spaces whether EV Installed or EV Ready at 208/240V and 40A per space. In an EV Ready or EV Capable Space, the circuit shall terminate in a suitable termination point such as a receptacle, junction box, or an EVSE, and be located in close proximity to the proposed location of the EV parking spaces.

- 5. EV Load Management Systems are permitted with shared or publicly accessible Level 2 EVSE, provided a minimum of 20 Amperes are delivered to each connected vehicle.
- 6. EVSE may be wall or pole mounted. EVSE may be shared among two or more spaces.
- 7. Signage and parking space paint shall be consistent with applicable standards and shall clearly identify EV Installed Spaces as well as any restrictions regarding users and time limits. Where public or shared access is permitted, rates shall be posted with sufficient size and visibility to be read before entering the parking space. Directional signage leading to EV charging spaces is permitted in addition to any other directional signage.
- 8. Applicants may request a waiver or reduction of electric vehicle parking requirements from the Planning and Zoning Commission during site plan approval based specific site conditions or anticipated need over 10 year period.
- 9. Location and safety considerations:
  - a. The EVSEs shall be located in desirable and convenient parking locations that will serve as an incentive for the use of electric vehicles. Placement may consider separate needs of customer and employee parking areas. Appropriate sharing of parking among EV users, ADA users and others should be considered in allocating spaces.
  - b. Electric vehicle charging stations are not permitted within the Town or State right-of-way except at municipal sites and adjacent to designated on-street parking.
  - c. The installation of an EVSE shall not reduce the vehicle's parking area dimensions below the size and standards required for parking spaces under section 6.4.5. This applies to EV Installed Parking Spaces as well as EV Ready Parking Spaces and EV Capable Parking Spaces.
  - d. Equipment shall be protected by wheel stops or concrete-filled bollards. Curbing may be used in lieu of bollards and wheel stops if the battery charging station is set back a minimum of 24 inches from the face of the curb.
  - e. Equipment mounted on pedestals, lighting posts, bollards, or other devices shall be designed and located so as not to impede pedestrian travel or create injury hazards for pedestrians.
  - f. Cords shall be retractable or have a place to hang the connector and cord sufficiently above the pedestrian surface. Any cords connecting the charger to a vehicle shall be configured so that they do not cross a driveway, sidewalk, or passenger unloading area.
  - g. As established in Section 6.4, enough EV Charging Stations shall meet ADA Handicapped Accessible standards as defined in Paragraph 6.4.4.G Handicapped Parking. In addition to the usual requirements for Handicapped Parking, Accessible EV Charging Stations shall ensure access to equipment and cords. This is illustrated in Figure 11.8A.

#### Figure 11.8A – EV Charging Station Design, including Accessible EV Charging Stations

[Note: We should have graphics experts redraw this figure. The left-most Accessible space is probably not legal in CT. Also, I would like to show some EV spaces with bollards on the lower right side.



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WEBB SITE: www. mannarinobuilders.com

# MANNARINO BUILDERS, INC.

**January 7, 2021** 

Town of South Windsor Michele Lipe, Town Planner 1540 Sullivan Avenue South Windsor, Ct. 06074

Re: Chestnut Ridge Request for Model Homes

Dear Michele,

Please accept this letter as a formal request to the Planning and Zoning Commission for the approval to build two model homes at Chestnut Ridge before posting the final bond. It is fully understood that we will not be allowed to request Certificates of Occupancy until all standard items are satisfied as seen by the town staff. If you have any questions please contact me.

Thank you,

Robert Mannarino

Mannarino Builders, Inc.

Robert Mannarino



P.O. BOX 1167 21 JEFFREY DRIVE **SOUTH WINDSOR, CT 06074** 

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January 14, 2021

Town of South Windsor Planning & Zoning Commission 1540 Sullivan Avenue South Windsor CT 06074

Re: Appl. 20-56P, Vintage Hill II Subdivision, 503 Barber Hill Road

**Dear Commissioners:** 

On behalf of our client, UW Vintage Lane II LLC, we hereby request two consecutive 90-day extensions for filing subdivision plans for the above-referenced subdivision in the Town Clerk's office. Thank you for your consideration.

Sincerely,

DESIGN PROFESSIONALS, INC.

Benjamin P. Wheeler, PLA

**Director of Operations**