

ELECTRIC VEHICLE CHARGING STATIONS WORKING GROUP

April 26, 2022

Via Webinar



WESTFORD ELECTRIC VEHICLE (EV) CHARGING STATIONS WORKING GROUP

MEETING AGENDA
Tuesday, April 26, 2022
7:15 PM Meeting

Via Webinar

Please see instructions for participation below

1. Call to order
2. Old/New business
3. Discuss timeline to present proposed Bylaw changes to Planning Board for Special Town Meeting in the fall
4. Draft potential amendments to the Westford Zoning Bylaw (including but not limited to numbers/percentages of EV spaces required for new developments and EV-related definitions)
5. Incentivizing EV charging stations for existing developments
6. Approve minutes: April 12, 2022
7. Set date, time, and scribe for next meeting
8. Adjournment

Instructions for participation:

Register for the meeting by going to this link:

https://westfordma.gov.zoom.us/webinar/register/WN_ExUA_wySKKI0fO6hOUhKQ

After registering, you will receive a confirmation email containing information about joining the webinar.

If you do not have access to this method of participation, please submit written comments to Sierra Pelletier, Assistant Planner, spelletier@westfordma.gov by 12:00 pm on April 26, 2022.

If any member of the public wishing to attend this meeting seeks special accommodations in accordance with the Americans with Disabilities Act, please contact the Permitting Department at (978) 692-5524 or email etoothaker@westfordma.gov

Old/New business

From: [Sierra Pelletier](#)
To: [Sierra Pelletier](#)
Bcc: [Chauncey Chu](#); [Gerry DiBello](#); [Jeremy Arnold](#); [Robert Shaffer \(rshaffer16@icloud.com\)](#); [Tom Teller](#)
Subject: RE: EV Working Group - Next Meeting
Date: Tuesday, April 19, 2022 3:15:05 PM

Hi all,

I hope you had a great weekend and happy holidays.

I just spoke with the Building Commissioner very generally about voluntary installation. You'd need to pull an electrical permit (and also a building permit if installing bollards or similar). The Commissioner would want to review a proposed plan first, and depending on the scope or work, review by the Planning Board may occur via Site Plan Review (SPR) or an amendment/modification to an existing decision (like SPR or parking special permit).

I am unsure about any MUTCD update.

Sierra Pelletier
Assistant Planner
Town of Westford
55 Main Street
Westford, MA 01886
spelletier@westfordma.gov
978.692.5524

From: Sierra Pelletier
Sent: Thursday, April 14, 2022 8:20 AM
To: Henry Fontaine <hfontaine@westfordma.gov>
Subject: EV Working Group - Next Meeting

Hi Henry,

In discussion at the EV Working Group meeting on Tuesday, a couple potential questions came up that you may be able to help answer, or guide me to where we could find the answer. If existing commercial and multi-family projects wanted to install EV spaces on their own, could they do it as of right (simply getting a building/electrical permit and meeting applicable building codes)? Is the MUTDC planned to be updated to include additional EV-related things (or are there any other code updates anticipated that you're aware of)?

Their next meeting is April 26th.

Thank you,

Sierra Pelletier
Assistant Planner

**Timeline to present proposed Bylaw changes for
Special Town Meeting**



TOWN OF WESTFORD
2021 Special Town Meeting Timeline
Saturday, October 16, 2021

EVENT	NOTES	DATE
Warrant opens	Select Board may announce warrant opening and closing date at same meeting.	Tuesday, July 27, 2021
Board-, committee-, and dept-sponsored warrant article submission deadline	Warrant articles are forwarded to Counsel for review	Tuesday, August 17, 2021 3 pm
All Petition articles submission deadline		Thursday, August 19, 2021 4 pm
Planning Board public hearing notices to Eagle Independent	1 st published at least 2 weeks prior to hearing	Thursday, August 26, 2021 12:00 PM
Select Board review proposed warrant articles, set warrant order, review draft motions		Tuesday, September 14, 2021
Planning Board opens public hearings on zoning articles		Monday, September 20, 2021
Select Board sign STM warrant Warrant to be closed at SB meeting Select Board take positions on warrant articles; finalize motions		Tuesday, September 28, 2021
Town meeting-related reports & records are available online and at Town Clerk's office Warrant Posting deadline	Town Bylaw requirement: report available and warrant posted 2 weeks prior.	Friday, October 1, 2021
Planning Board closes public hearings on zoning articles Town Manager finalizes warrant summary for postcard mailing		Monday, October 4, 2021
League of Women Voters Warrant Review		Thursday, October 7, 2021*

Voter registration deadline 8:00pm Post card is mailed to residents		Friday, October 6, 2021
Columbus Day Holiday celebrated		Monday, October 11, 2021
Planning Board reports to Select Board on zoning articles Select Board & Finance Committee finalize positions on Warrant articles		Tuesday, October 12, 2021
PowerPoint presentations to IT Dept		Wednesday, October 13, 2021 12:00 PM
Motions Meeting		Wednesday, October 13, 2021*
Special Town Meeting		Monday, October 16, 2021 1:00 PM – WA Trustees Field
Rain date, if needed		Sunday, October 17, 2021 10:00 AM

Holidays in 2021

Labor Day: Monday, Sept 6

Rosh Hashanah: Sunset Sept 6-Sept 7

Yom Kippur: Sunset Sept 15-Sept 16

Columbus Day: October 11

*tentative

Potential amendments of the Westford Zoning Bylaw

From 5.1: Off-Street Parking Regulations

additional spaces, the Building Commissioner may require that the spaces be added.

5.1.5 Parking Standards.

The following standards shall apply to off-street parking:

1. *Parking Space Size.* Each parking space shall measure nine (9) feet in width and eighteen (18) feet in length.
2. *Allowance for Compact Cars.* On all properties containing general office buildings, research/office park facilities or manufacturing facilities and which contain at least forty thousand (40,000) square feet of gross floor area in the building(s), thirty (30) percent of the required parking may be in stalls for compact cars, provided that area for these stalls is designated by signs and other markings and each parking space shall measure at least eight (8) feet in width and sixteen (16) feet in length.
3. *Handicapped Parking.* Parking spaces for the exclusive use of handicapped individuals shall be provided in accordance with the most recent rules and regulations of the Architectural Access Board, 521 CMR 23.00.
4. *Lighting.* All parking areas which are proposed to be illuminated shall provide an illumination of at least one (1) foot candle. All illumination shall be shielded so as not to shine directly onto a public or private way or onto any property in a residential district.
5. *Prohibition.* Parking spaces shall be arranged so as not to require backing of automobiles onto any street.

Allowance/
Requirement
for EV spaces
& AAB-
compliant EV
space (by zone,
overlay, use) -
Maybe refer to
this section
throughout.

Or:
Add
subsection

5.1.6 Additional Parking Standards for Areas with More than Five Spaces.

All parking areas containing over five spaces, including automobile and drive-in establishments of all types, shall be either contained within structures or subject to the following:

1. *Surface.* The area and access driveways thereto shall be surfaced with bituminous or cement concrete material and shall be graded and drained so as to dispose of all surface water accumulation away from adjacent public ways.
2. *Storage.* There shall not be any storage of materials or equipment or display of merchandise within required parking area except as part of approved building operations.
3. *Location.* Parking shall not be located nearer than fifteen (15) feet from any lot line.

5.1.7 Landscaping in Parking Areas.

1. The area shall be effectively screened on each side which adjoins or faces the side or rear lot line of a lot situated in any RA or RB District, consisting of a solid fence or wall not less than three (3) feet nor more than six (6) feet in height

From 7.2: Flexible Development

2. Five (5) percent of the units shall be affordable to persons or families qualifying as moderate income; and
3. Five (5) percent of the units shall be affordable to persons or families qualifying as median income.

When computing the number of affordable units, the number will be rounded to the next lower integer.

7.2.9 Standards.

The following standards shall apply in a Flexible Development:

1. *Types of Buildings.* The Flexible Development may consist of any combinations of single-family, two-family, and multifamily residential structures. A multifamily structure shall not contain more than five (5) dwelling units. The architecture of all multifamily buildings shall be residential in character, particularly providing gabled roofs, predominately wood siding, an articulated footprint, and varied facades. Residential structures shall be oriented toward the street serving premises and not the required parking area.
2. *Roads.* The principal roadway(s) serving the site may be designed to conform with the standards of the Planning Board where the roadway is or may be ultimately intended for dedication and acceptance by the Town of Westford. Private ways shall be adequate for the intended use and vehicular traffic and shall be maintained by an association of unit owners or by the Applicant.
3. *Parking.* Each dwelling unit shall be served by two (2) off-street parking spaces. Parking spaces in front of garages may count in this computation.
4. *Buffer Areas.* A buffer area of one hundred (100) feet shall be provided at the perimeter of the property where it abuts residentially zoned or occupied properties, except for driveways necessary for access and egress to and from the site. No vegetation in this buffer area will be disturbed, destroyed, or removed, except for normal maintenance. The Planning Board may waive the buffer requirement.
 - a. where the land abutting the site is the subject of a permanent restriction for conservation or recreation so long as a buffer is established of at least fifty (50) feet in depth which may include such restricted land area within such buffer area calculation;
 - b. where the land abutting the site is held by the Town for conservation or recreation purpose; or
 - c. the Planning Board determines that a smaller buffer will suffice to accomplish the objectives set forth herein.
5. *Drainage.* Stormwater management shall be consistent with the requirements

Add %
required for
EV spaces
(multi-family);
add incentive
for EV make-
ready for
single-family

From 7.3: Assisted Living Facilities

Add % required
for EV spaces
and/or add
incentive for
EV ready &
make-ready

5. *Roadways.* The public roadway providing access to the site shall be a thoroughfare. The principal roadway(s) within the site shall be designed to conform to the standards of the Town where the roadway is or may be ultimately intended for dedication and acceptance by the Town of Westford. Private ways within the site shall be adequate for the intended use and vehicular traffic and shall be maintained by an association of unit owners or by the Applicant.
6. *Parking.* The applicant shall provide adequate parking to serve all anticipated uses on the property, with information detailing the method of computation of parking spaces. The minimum number of parking spaces provided on the site shall be 0.3 parking space per dwelling unit in an ALF. One (1) parking space shall be provided for every three (3) employees during the largest shift. The Planning Board may increase the required parking by up to 10% to serve the needs of employees, visitors and service vehicles. All parking areas shall be screened from view from adjacent residentially zoned or occupied premises located outside the site, including public ways, by a landscaped border at least ten (10) feet in width. Parking lots in front setbacks in residential zones, and in buffer areas in all zones, with the exception of necessary access driveways, are prohibited. Parking areas in residential districts shall be located to the side or rear of all buildings. Parking lot layouts shall be planned to permit landscaping, buffering, or screening to prevent direct views of parked vehicles from adjacent streets. The use of traditional picket fencing, hedges, walls, or landscape berms to define parking areas is encouraged. In parking areas of eleven or more parking stalls, at least one tree of three-inch or greater caliper shall be planted for every six parking places. Adequate tree wells and irrigation shall be provided for all parking lot landscaping. Pedestrian access is to be taken into consideration in parking lot design. The use of separate walkways is encouraged. Textured paving or grade separated (elevated) walkways are desired on all pedestrian access ways.
7. *Loading.* Loading areas must be at least 20 X 9 feet, and have a minimum overhead clearance of 10 feet. Screening and landscaping shall be provided to block all views of loading areas (except those specifically designated for emergency vehicles) from the public right of way and adjacent properties.
- 8.
9. *Surface Drainage.* The surface drainage system shall be designed in accordance with the Regulations of the Planning Board, Board of Health and Conservation Commission.
10. *Utilities.* All electric, gas, telephone, and water distribution lines shall be placed underground, except upon a demonstration of exceptional circumstances. The facility shall be served by the municipal water system.
11. *Paths.* Paths for the use of residents shall be attractively designed with proper regard for convenience, separation of vehicular, bicycle and pedestrian traffic, adequate connectivity, completeness of access to the various amenities and facilities on the site and to pathways on adjacent sites.

From 8.4: Senior Residential Multifamily Overlay District

8.4.5 Design Process.

Each SRMD shall follow the design process outlined below. When the development plan is submitted, applicants shall be prepared to demonstrate to the Planning Board that this design process was considered in determining the layout of proposed streets, dwelling locations, and contiguous open space.

1. *Understanding the Site.* The first step is to inventory existing site features, taking care to identify sensitive and noteworthy natural, scenic and cultural resources on the site, and to determine the connection of these important features to each other.
2. *Evaluating Site Context.* The second step is to evaluate the site in its larger context by identifying physical (e.g., stream corridors, wetlands), transportation (e.g. road and bicycle networks), and cultural (e.g., recreational opportunities) connections to surrounding land uses and activities.
3. *Designating the Open Space.* The third step is to identify the buffer areas and the contiguous open space to be preserved on the site. Such open space should include the most sensitive and noteworthy resources of the site, and, where appropriate, areas that serve to extend neighborhood open space networks.
4. *Location of Development Areas.* The fourth step is to locate building sites, streets, parking areas, paths and other built features of the development. The design should include a delineation of private yards, public streets and other areas, and shared amenities, so as to reflect an integrated community, with emphasis on consistency with Westford's historical development patterns.

8.4.6 Design Requirements.

The following standards shall apply within the SRMOD:

1. *Water Supply.* SRMDs shall be served by a public water system or private communal water systems which conform to all applicable regulations of the Commonwealth of Massachusetts and the Town of Westford. The Water supply shall be sufficient at all times to meet public water supply and fire protection requirements and, in that regard, shall incorporate the reasonable recommendations of the Town Water and Fire Departments. All main service lines for water, sewer and utilities shall be underground or as otherwise approved by the Planning Board through the site plan review process.
2. *Drainage.* Natural surface drainage channels shall be either incorporated into the overall design or preserved as part of the common land. The development area shall be served by storm sewers.
3. *Building Separation.* The distance between buildings shall be a minimum of forty (40) feet, except that any building containing more than two (2) stories may not be closer than fifty-five (55) feet from any building.
4. *Parking.* Onsite paved parking areas, including at least two (2) parking spaces

Add % required for EV spaces and/or add incentive for EV ready & make-ready

for every Dwelling Unit with minimum dimensions of nine by eighteen (9x18) feet and adequate provisions for aisles, drives, visitor parking, and snow disposal, shall be provided. Separate buildings for parking may be permitted or located and designed so as to complement the building design and site layout as determined and approved by the Planning Board through the site plan review process. Parking areas shall be designed so that parking for each

Dwelling Unit will be located within one hundred (100) feet of the entrance to such dwelling unit.

5. *Building Height.* No building shall exceed thirty-five (35) feet in height. Dwelling units located in part below the upper finished grade on sloping sites shall be deemed one (1) story.
6. *Dwelling Units per Building.* A SRMD may consist of any combination of single family, two-family and multifamily residential structures. A multifamily structure shall not contain more than five (5) dwelling units. The architecture of all multifamily buildings shall be residential in character, particularly providing gabled roofs, predominantly wood siding, an articulated footprint and varied facades. Residential structures shall be oriented toward the street serving the premises and not the required parking area.
7. *Dwelling Unit Space.* All dwelling units within multiple unit buildings shall have a minimum floor space area of seven hundred eighty (780) square feet.
8. *Bedrooms.* No SRMD shall have more than ten (10%) percent of the total number of dwelling units with three (3) bedrooms. No dwelling unit may contain more than three (3) bedrooms. A combined sleeping and living room in an efficiency or studio unit, so called, shall be considered one (1) bedroom, and any other separate room in any unit which is not a single living room or equipped kitchen and is shown on a plan as being for other than bedroom use but which, because of location, size or arrangement could, in the opinion of the Board, be used or adapted for use as a bedroom shall be considered as a bedroom for density calculations. No attic, loft or other storage or similarly usable space shall be used as or altered to create regular bedroom space, nor shall the construction or other aspects facilitate such use or alteration.
9. *Screening.* All sewage facilities, service areas and equipment, trash, conveniences, parking, and recreational areas shall have screening as required by the Board, and as otherwise required by the Planning Board through the site plan review process.
10. *Landscaping.* The site shall be preserved and enhanced by retaining and protecting trees, shrubs, ground cover, stone walls, and other site features insofar as practicable. Additional new plant materials shall be added for privacy, shade, beauty of building and grounds, and to screen features which the Board deems detrimental to the aesthetics of the development, and as otherwise required by the Planning Board through the site plan review process.
11. *Open Space.* All of the land within a SRMD which is not used to meet building separation requirements, and is not comprised of structures, roadways,

From 8.5: Mill Conversion Overlay District

- b. where the construction of a wastewater treatment plant necessitates such relief.
2. *Removal and Replacement of Vegetation.* Within the site, no clear cutting shall be permitted, except as authorized by special permit and incidental to construction of buildings, roads, trails and parking areas. The Planning Board may require suitable landscaping or replacement of vegetation.
3. *Roadways.* The principal roadway(s) within the site shall be adequate for the intended use and vehicular traffic and shall be maintained by an association of unit owners or by the Applicant.
4. *Number of Parking Spaces .* The applicant shall provide adequate parking to serve all anticipated uses on the property, with information detailing the method of computation of parking spaces. The minimum number of parking spaces shall be computed using the requirements of Section 5.1 or other applicable provision herein. The Planning Board may increase the required parking by up to 10% to serve the needs of residents, employees, visitors and service vehicles. The Planning Board may reduce the otherwise required number of parking spaces where the applicant demonstrates that an adequate number of spaces will be provided.
5. *Commercial Vehicles.* Commercial vehicles owned or operated by owners or tenants of the MCP, or their agents, servants, licensees, suppliers and invitees shall be parked inside a garage, or suitably screened or designated area, except for delivery or service vehicles in the active service of receiving and delivering goods or services.
6. *Parking Areas.* All parking areas shall be screened from view from adjacent residentially zoned or occupied premises located outside the site, including public ways, by a landscaped border at least ten (10) feet in width. Parking lots shall be located to the rear or side of all buildings and shall not be located in front setbacks or in buffer areas; provided, however, that the Planning Board may waive these provisions for existing parking lots and/or existing buildings. Parking lot layouts shall be planned to permit landscaping, buffers, or screening to prevent direct views of parked vehicles from adjacent streets. The use of traditional picket fencing, hedges, walls, or landscape berms to define parking areas is encouraged. In parking areas of eleven or more parking stalls, at least one tree of three-inch or greater caliper shall be planted for every six parking places. Adequate tree wells and irrigation shall be provided for all parking lot landscaping. Pedestrian access is to be taken into consideration in parking lot design. The use of separate walkways is encouraged. Textured paving or grade separated (elevated) walkways are desired on all pedestrian access ways.
7. *Paving.* Paving should be textured or of different materials at pedestrian crossings and walkways. The use of stone, brick or cultured stone pavers for entrance walkway borders is encouraged. The use of textured materials for

May NOT
need to
change/add
to this - it
refers to
other section

10.2: General Definitions

"offered" to be "used or occupied"; the word "building", "structure", "lot", "land", or "premises" shall be construed as though followed by the words "or any portion thereof"; and the word "shall" is always mandatory and not merely directory. If any word in this chapter is not so defined or is not hereafter defined, it shall have its ordinary dictionary meaning.

10.2 GENERAL DEFINITIONS

[Amended 5-5-2007 ATM, Art. 22; 10-22-2013 Adj. STM Art. 17; 3-22-2014 ATM, Art 30; 04-02-2016 ATM, Art. 21 & 22, STM 10-16-2017, Art 11, 13,14]

Add:
EV charging
stations, EV
make-ready
spaces, etc

As used in this chapter, the following terms shall have the meanings indicated:

Accessory Building or Structure: A detached building, the use of which is customarily incidental and subordinate to that of the principal building and which is located on the same lot as that occupied by the principal building.

Accessory Dwelling Unit: A dwelling unit subordinate and incidental to the principal dwelling unit located on the same premises, whether in the same structure or in a separate accessory structure.

Accessory Use: A use incidental and subordinate to the principal use of a structure or lot, or a use not the principal use which is located on the same lot as the principal structure or use. Unless otherwise provided herein "Accessory use" by area of the structure shall be interpreted not to exceed thirty percent (30%) of the gross floor area of the structure, excluding attic, garage and basement, or of the lot on which the structure is located.

Adequate sight distance: This term shall mean both adequate stopping sight distance and adequate intersection sight distance. Stopping sight distance (SSD) is the distance traveled that is directly related to vehicle speeds and the driver's ability to assess and react to a conflict in the roadway, and the ability to stop prior to reaching the conflict. Simply stated, SSD involves distance traveled due to perception and reaction time and braking distance. SSD is measured along the frontage roadway in relation to a proposed site driveway. The safety standard used for determining adequate SSD is the criteria cited in the AASHTO "Green Book"⁶. This criteria is also adopted by MassHighway and noted in the MassHighway Design Manual This criteria *must* be satisfied to assure safety standards. [Added 5-7-2005 ATM Art. 18]

Adult Day Care, Large: Facility, whether accessory or principal, for the social day care or adult day care of more than six persons over the age of sixteen.

Adult Day Care, Small: Facility, whether accessory or principal, for the social day care or adult day care of not more than six persons over the age of sixteen.

Adult Use: One of the following types of operations:

Adult Bookstore: An establishment having as a substantial or significant portion of its stock-in-trade printed matter, books, magazines, picture periodicals,

⁶ A Policy on Geometric Design of Highways and Streets; American Association of State Highway and Transportation Officials; 2001

Appendix D:
Table of Parking Requirements

Appendix D: Parking Table

PRINCIPAL USE

REQUIRED PARKING SPACES

A. Residential Uses

- 1. Single-family dwelling
- 2. Conversion of dwelling
- 3. Open space residential development
- 4. Flexible development
- 5. Assisted living facility

- 2 per dwelling unit
- 2 per dwelling unit
- 2 per dwelling unit
- 2 per dwelling unit
- As set forth in Section 7

Research how best to do parking table to include EV (footnote?)

B. Exempt and Institutional Uses

- 1. Use of land or structures for religious purposes
- 2. Use of land or structures for educational purposes on land owned or leased by the commonwealth or any of its agencies, subdivisions or bodies politic or by a religious sect or denomination, or by a nonprofit educational corporation
- 3. Child care facility in existing building
- 4. Child care facility in new building
- 5. Cemetery
- 6. Municipal facility, excluding parking lots
- 7. Municipal parking lot
- 8. Essential services
- 9. Hospital or Clinic

- 1 for each 3.5 sets
- For elementary schools:* 1 space for each teacher and each employee and 1 space per classroom;
For secondary schools: 1 space for each teacher and each employee and 1 space for each 4 students;
For college or other institutions of higher learning above the 12th grade: 1 space for each 3.5 seats in an auditorium or 1 for each 17 classroom seats, whichever is greater/plus one space per employee on the largest shift
- 1 for each teacher and each other employee and 2 spaces per classroom
- 1 space for each teacher and each other employee and 2 spaces per classroom
- Not applicable
- As may be determined by the Planning Board during site plan review
- Not applicable
- As may be determined by the Planning Board during site plan review
- 2 per bed

C. Agricultural Uses

- 1. Use of land for the primary purpose of agriculture, horticulture, floriculture, or viticulture on a parcel of more than five acres in area

Not applicable

[1] *Editor's Note: The Table of Use Regulations is included as an attachment to this chapter.*

§ 5.18 Hours of retail food stores.

- A. No person shall sell any food at retail or via a drive-through between the hours of 12:00 midnight and 6:00 a.m.
- B. No store or place of business engaged in retail sale of food shall be open for transaction of retail business between the hours of 12:00 midnight and 6:00 a.m.
- C. The term "food" used in this ordinance shall include any article or commodity, however stored or packaged, intended for human consumption, and shall include alcoholic beverages to be consumed off the premises at which they are sold, unless any other law or permit or license granted to the seller of such beverages shall otherwise provide.
- D. This section shall not apply to the sale of food or alcoholic beverages when such sale is by a common victualler or inn holder license under Chapter 140 of the General Laws, primarily engaged in the sale of food to be consumed on the premises where sold.
- E. In cases where, in its opinion, the public good requires it, the Board of Appeals may issue a special permit allowing a store to remain open for the transaction of such business to an hour, specified in the permit, later than 12:00 midnight or to remain open 24 hours a day. Such special permits shall remain in effect for period of one year. There shall be an annual inspection to confirm continued conformance with said special permit.

§ 5.19 Shopping centers.

[Added eff. 2-4-1994 by Ord. No. 497]

Any shopping center having previously received a special permit or one which was in business and continued in business subject to the special permit provisions of the City of Methuen shall be allowed, without the necessity of a further application for a special permit, to conduct the following businesses: restaurant, eating places, fast-order food establishments, education and accessory use (for profit) and laundry, so long as same is operated and/or conducted within the same footprint of the structure or structures which were a part of the original special permit.

§ 5.20 Electric vehicle charging stations and battery exchange stations.

[Added eff. 5-2-2011 by Ord. No. 849]

Reference should be made to the most recent edition of the Massachusetts Electrical Code.

- A. Definitions. As used in this section, the following terms shall have the meanings indicated:

BATTERY CHARGING STATION

An electrical component assembly or cluster of component assemblies designed specifically to charge batteries within electric vehicles, which meets or exceeds any standards, codes and regulations set forth.

BATTERY ELECTRIC VEHICLE (BEV)

Any vehicle that operates exclusively on electrical energy from an off-board source that is stored in the vehicle's batteries, and produces zero tailpipe emissions or pollution when stationary or operating.

BATTERY EXCHANGE STATION

A fully automated facility that will enable an electric vehicle with a swappable battery to enter a drive lane and exchange the depleted battery with a fully charged battery through a fully automated process, which meets or exceeds any standards, codes and regulations set forth.

CHARGING LEVELS

The standardized indicators of electrical force, or voltage, at which an electric vehicle's battery is recharged. Levels 1, 2 and 3 are the most common EV charging levels, and include the following specifications:

- (1) Level 1 is considered slow charging.
- (2) Level 2 is considered medium charging.

- (3) Level 3 is considered fast charging.

ELECTRIC VEHICLE

Any vehicle that operates, either partially or exclusively, on electrical energy from the grid, or an off-board source, that is stored on-board for motive purpose. "Electric vehicle" includes:

- (1) A battery electric vehicle;
- (2) A plug-in hybrid electric vehicle;
- (3) A neighborhood electric vehicle; and
- (4) A medium-speed electric vehicle.

ELECTRIC VEHICLE CHARGING STATION

A public or private parking space that is served by battery charging station equipment that has as its primary purpose the transfer of electric energy (by conductive or inductive means) to a battery or other energy storage device in an electric vehicle. An electric vehicle charging station equipped with Level 1 or Level 2 charging equipment is permitted outright as an accessory use to any principal use.

ELECTRIC VEHICLE INFRASTRUCTURE

Structures, machinery and equipment necessary and integral to support an electric vehicle, including battery charging stations, rapid charging stations and battery exchange stations.

ELECTRIC VEHICLE PARKING SPACE

Any marked parking space that identifies the use to be exclusively for an electric vehicle.

NONELECTRIC VEHICLE

Any vehicle that does not meet the definition of "electric vehicle."

RAPID CHARGING STATION

An industrial-grade electrical outlet that allows for faster recharging of electric vehicle batteries through higher power levels, which meets or exceeds any standards, codes and regulations set forth.

B. Applicability.

- (1) Electric vehicle charging station(s) with a Level 1 or 2 charging level shall be permitted in a single-family or multifamily zone designed to serve the occupants of the home and in all other zones.
- (2) Electric vehicle charging station(s) with a Level 3 or greater charging level must be installed in a parking lot at a commercial or municipal destination, or located in a vehicle service station. These stations are expected to have intensive use and will be permitted to have multiple "rapid charging stations" to serve expected demand.
- (3) Battery exchange stations are permitted in the BN, BH, BL and IL Zoning districts with a special permit from the ZBA. This use is specifically prohibited in all residential zones.

C. Process for review.

- (1) Electric vehicle charging station.
 - (a) New residential construction. If associated with new residential construction, installation of a Level 1 or 2 battery charging station shall be processed in association with the underlying permit(s).
 - (b) Retrofitting single-family or multifamily residential. If retrofitting a single-family home for a battery charging station, an electric permit shall be required.
 - (c) New commercial, industrial construction. If associated with new construction, installation of a battery charging station shall be processed in association with the underlying permit(s).
 - (d) Retrofitting a commercial site. If retrofitting an existing commercial site for a battery charging station(s), an electric permit and review of a site plan by the Building Inspector to confirm the proposed locations will be required. Additional permits may be required based upon the location of the proposed station(s).

- (2) Battery exchange station(s). A special permit from the ZBA is required in all zones. Additional permits may be required based upon the location and size of the proposed station(s).

D. Design criteria. The following criteria shall be applied to the location and design of all electric vehicle charging facilities:

- (1) Parking spaces for electric vehicles must not be located in the most convenient spots because this will encourage use by nonelectric vehicles.
- (2) Design should be appropriate to the location and use. Facilities should be able to be readily identified by electric cars users but blend into the surrounding landscape/architecture for compatibility with the character and use of the site.
- (3) Where provided, spaces should be standard-size parking stalls but designed in a way that will discourage nonelectric car vehicles from using them.
- (4) Number. No minimum number of electric vehicle charging spaces is required, however, No more than 10% of the total number of parking spaces may be designated as electric vehicle charging stations.
- (5) Minimum parking requirements. An electric vehicle charging space may count for 1/2 of a space in the calculation for minimum parking spaces that are required pursuant to other provisions of the Zoning Ordinance.
- (6) Signage. Each charging station space shall be posted with signage indicating the space is only for electric vehicle charging purposes. Days and hours of operations shall be included if time limits or tow-away provisions are to be enforced by the owner. Information identifying voltage and amperage levels or safety information must be posted.
- (7) Accessibility. Where charging station equipment is provided within an adjacent pedestrian circulation area, such as a sidewalk or accessible route to the building entrance, the charging equipment must be located so as to not interfere with accessibility requirements. The site plan of existing parking lot layout and proposed charging stations must be reviewed and approved by the Building Inspector.
- (8) Maintenance. Charging station equipment shall be maintained in all respects, including the functioning of the charging equipment. A phone number or other contact information shall be provided on the charging station equipment for reporting when the equipment is not functioning or other problems are encountered.

§ 5.21 Large-scale ground-mounted solar photovoltaic installations.

[Added eff. 8-8-2011 by Ord. No. 853]

A. Purpose.

- (1) The purpose of this ordinance is to promote the creation of new large-scale ground-mounted solar photovoltaic installations by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations that address public safety, minimize impacts on scenic, natural and historic resources and to provide adequate financial assurance for the eventual decommissioning of such installations.
- (2) The provisions set forth in this section shall apply to the construction, operation and/or repair of large-scale ground-mounted solar photovoltaic installations.

B. Applicability.

- (1) This section applies to large-scale ground-mounted solar photovoltaic installations proposed to be constructed after the effective date of this section. This section also pertains to physical modifications that materially alter the type, configuration or size of these installations or related equipment.
- (2) Nothing in this section should be construed to prevent the installation of accessory roof-mounted solar photovoltaic installations.

C. Definitions. As used in this section, the following terms shall have the meanings indicated:

DESIGNATED LOCATION

Ground-mounted large-scale solar photovoltaic installations may be sited as-of right on lots greater than or equal to two acres in size and located in the CN, BH, BN, BL, IL or H Zoning District.

Incentivizing EV charging stations for existing developments

Sierra Pelletier

Subject: EV Working Group - Potential Questions

From: Jeffrey Morrisette <jmorrisette@westfordma.gov>
Sent: Thursday, April 21, 2022 4:02 PM
To: Sierra Pelletier <spelletier@westfordma.gov>
Cc: Joseph Giniewicz <jginiewicz@westfordma.gov>
Subject: RE: EV Working Group - Potential Questions

Hi Sierra, a couple of quick thoughts below in purple:

Jeffrey Morrisette
Director of Land Use Management
Town of Westford
55 Main Street
Westford, MA 01886
jmorrisette@westfordma.gov
Telephone: 978.692.5524

From: Sierra Pelletier
Sent: Wednesday, April 13, 2022 10:21 AM
To: Jeffrey Morrisette <jmorrisette@westfordma.gov>
Cc: Joseph Giniewicz <jginiewicz@westfordma.gov>
Subject: EV Working Group - Potential Questions

Good morning Jeff,

At last night's meeting, the EV group discussed their timeline for proposing changes as well as some potential questions for the Planning Department and/or Counsel. The Group has decided to up the number of their meetings over the next 2 months and see if Special Town Meeting is possible for proposed bylaw changes. I'd like to confirm the timeline for that meeting – do you have one handy?

Some topics that came up that may need input from Planning staff and/or Counsel are:

What avenues (if any) could the Planning Board have to require (or incentivize) EV spaces within an existing development if they come before the Planning Board for SPR? Assuming a simple change of use would not allow for any such request/requirement, but what about a more involved SPR with exterior changes, e.g., one that includes building expansion or parking lot changes?

In my opinion, we cannot require EV spaces at this time. The Zoning Bylaw would probably first have to be amended to revise parking requirements. Even so, there could still be some potential issues for existing developed sites.

Is it proper to reference something to the effect of “in compliance with the latest electrical code/MUTCD...” in a bylaw (for lighting, signage, etc) so they do not have to give specifics and update those if they ever change? Or “in compliance with applicable local, state, and federal codes”? Or does it not need to be mentioned at all, as they'd need to meet applicable codes regardless?

In my opinion, it would not be proper. Pursuant to M.G.L. Chapter 40A Section 3, zoning may not regulate (paraphrased) that which is regulated by state building code.

Their next meeting is 4/26 and I don't assume we'll have time to ask Counsel/staff such questions during that time, but I wanted you to have it on the radar.

Thank you,

Sierra Pelletier
Assistant Planner
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55 Main Street
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Minutes



WESTFORD ELECTRIC VEHICLE (EV) CHARGING STATIONS WORKING GROUP Meeting of April 12, 2022

A meeting of the Westford Electric Vehicle (EV) Charging Station Working Group (EVWG) was held at 7:00 PM on April 12, 2022, virtually via Zoom.

The following WG members were present: Chauncey Chu, Jerimy Arnold, Gerry DiBello, Bob Shaffer
Town Staff present: Sierra Pelletier, Assistant Planner

1. Call to Order

- The meeting was called to order at 7:01pm.

2. Old/New Business

- Tom reported that he had received data showing the number of EV's registered, by town, in Massachusetts as of March 2021. The data shows that Westford is about mid-pack in registrations when compared with all the other town and cities in the state.
- Gerry commented that a Lowell Drives Electric event will take place on Saturday April 30 at Heritage Farms Ice Cream in Lowell from 12-4:00pm. Many EV's will be present for test drives. EV owners will be available to relate their real-life ownership experiences.
- Chauncey reported that he has been working with the Economic Development Committee (EDC). Chauncey has learned thru the EDC that Orchard Square on Rt. 225 does not have any current plans for adding EV charging stations. The EDC has also contacted the owner of Westford Plaza who reported that he does not have plans for installing EV chargers. Chauncey noted that space is tight at this location and the owner would have to give up needed parking spaces for chargers. Another barrier mentioned by the EDC group is the installation costs. Even with available rebates, costs to install chargers can be high.
- Bob commented that we have to consider up to three classes of developments where EV chargers could be installed. When the owner of an existing development comes to the planning board seeking a change of use, parking space allocation must be revisited. At that point we might work with Town Council on seeing what we could incentivize or require to have the owner add EV chargers. This is a matter that can be investigated.

3. Discuss Timeline to Present Proposed Bylaw Changes to Planning Board for Special Town Meeting in the fall

- Chauncey commented that as a goal for the group he would like to propose EV Charger Bylaw changes at the October Special Town Meeting.
- Bob commented that any proposed zoning changes require public hearings. Additionally, the Planning Board needs at least one meeting to discuss any proposed changes before they

start the public meeting process. A realistic time frame is to create any proposed zoning changes three to four months before a Town Meeting.

- Chauncey noted that given Bob's comments, the group would have to finalize our proposed zoning changes no later than June to present them at fall Town Meeting.
- Tom commented that we could schedule additional meetings to be able to meet an early June deadline.
- Sierra commented that if our group wants to schedule extra meetings it may be possible to make the June deadline but the Town Meeting of Spring 2023 may be more realistic.
- There was additional discussion about meeting deadlines for Fall Town Meeting warrant. Bob and Sierra agreed to create a timeline for the group to have proposed bylaw changes ready for a Planning Board meeting.
- All the members agreed by voice vote to change our meetings from monthly to bi-weekly. Bob may not be able to take part in additional meetings due to his job requirements.

4. Brief Overview of Potential Section of the Westford Zoning Bylaw to Amend

- The group reviewed a document showing the current zoning bylaw sections provided by Sierra that would need updates for EV chargers requirements. These include sections dealing with; Off-street parking requirements (5.1), Signs (5.3), Planned Commercial and Industrial Developments (6.4), Definitions (10.2), and Table of Parking Requirements (Appendix D).
- Gerry presented some examples of various U.S. towns and cities that included their zoning requirements for the number of EV chargers per the number of parking spaces in new developments. The development examples included both industrial buildings and multi-unit dwellings. The examples showed large variations in the numbers of make-ready percentage to be allocated for chargers based on the type of land use. Other towns and cities specify not only the make-ready spaces but the number of spaces that must have a specified number of installed charging stations based on the total number of required spaces. In one case, the city/town required a certain number of the make-ready spaces to require that chargers be installed in those make-ready spaces after a certain number of years had passed since the land was first developed.
- Bob commented on what the zoning bylaws we propose would require for new single family residential homes. Should we require that this type of dwelling should include pre-wiring for an EVSE? For other types of developments, we might want to require a certain number of make-ready spaces for multi-unit or commercial development per population density.
- Chauncy asked Bob and Sierra about what currently happens if the Planning Board receives a request to add a charging station to any building? Bob stated that, in most cases, this type of request is more likely to come to the Building Commissioner.
- There was discussion regarding which of the examples Gerry presented regarding new construction they would favor. The group favored the example that specified the number of parking spaces that required installed chargers and the number that are required to be make-ready for each type of use case.

- There was agreement that we would closely examine the quite specific EV charger zoning example for Franklin County, NJ that was presented at a previous meeting. The full zoning bylaw might be a good template to use in designing a bylaw for Westford. We will discuss how to tailor the NJ bylaw to fit Westford at the next meeting.

5. Signage and MUTDC Compliance - Bob

- Bob reported on types of signage used to identify the location of chargers as they relate to the town's bylaws. The State of California has written a comprehensive Manual on Uniform Traffic Control Devices (MUTDC) document on EV signage standards that could prove useful in crafting Westford's bylaw changes. We could use these standards to choose appropriate signage that must be included at charging stations. Example: The maximum number of hours a car can be connected and charging as well as daily hours of operation. The group would need to decide what section of the zoning bylaws where signage would be specified.

6. Lighting Requirements - Jerimy

- There was a brief discussion on lighting requirements. Requirements will be discussed in more detail at a future meeting.

7. Make-Ready Space Requirements and EVSE Equipment Standards - Tom

- Tom reported that the terms EV-Ready and Make-Ready (used most frequently in zoning regulations) are commonly used terms in the bylaw examples he found in his research.
- Some common requirements:
 - Ordinance language must clearly define installed equipment compared to make-ready for future installations.
 - Make-ready spaces probably should not apply to DC-Fast chargers since the equipment requirements are high in cost.
 - Make-ready spaces are best applied to level-2 chargers that have less infrastructure requirements. Installation must comply with current National Electrical Code (NEC) current revision standards.
- Tom also presented a number of EVSE standard terms that could be applied to ordinance definition sections.

8. Potential Numbers/Percentages of EV Spaces Required - Gerry

- This agenda item was discussed in agenda item 4.

9. ADA Compliance with EV Spaces - Gerry

- This agenda item was discussed in agenda item 4.

10. Approve Minutes – March 8, 2022

- A motion was made by Bob to approve the March 8th minutes. Tom seconded the motion. Approval was unanimous.

11. Set Date, Time, and Scribe for Next Meeting

- The next meeting will be virtual on April 26 at 7:15pm.

12. Adjournment

- A motion to adjourn was made by Tom and seconded by Bob. Meeting adjourned at 9:03pm.

Respectfully submitted,
Gerald DiBello
4/20/2022

DRAFT