

AN ORDINANCE AMENDING THE CARRBORO LAND USE ORDINANCE TO ESTABLISH
REQUIREMENTS FOR ELECTRIC VEHICLE CHARGING STATIONS

****DRAFT 05-25-2021****

THE CARRBORO TOWN COUNCIL ORDAINS:

Section 1. Article XVIII, Section 15-290, Definitions, is amended to add three new definitions, “electric vehicle charging station,” “electric vehicle capable,” “green vehicle,” as listed below, and to renumber the subsequent definitions in alphabetical order.

- (3) **ELECTRIC VEHICLE CHARGING STATION (EV Charging Station).** Equipment that connects an electric vehicle to a source of electricity to recharge electric cars and plug-in hybrids; EV charging stations may also be referred to as electric vehicle supply equipment (EVSE). EV charging stations are classified into three levels based on charging speeds:

Level 1 – Level 1 Chargers use a 120 volt, alternating-current (AC) plug and require a dedicated circuit offering about five miles of range for everyone defined by the speed with which they provide a charge.

Level 2 – Level 2 Chargers use a 240 volt, alternating-current (AC) plug providing 10 to 20 miles of range for every hour of charging.

Level 3 – Level 3 Chargers use a 480 volt, direct-current (DC) plug, bypassing the onboard charger and providing DC electricity to the battery via a special charging port. Also known as fast chargers, Level 3 chargers provide up to 40 miles of range for every 10 minutes of charging.

- (4) **ELECTRIC VEHICLE CAPABLE.** Includes the installation of electric panel capacity with a dedicated branch circuit and underground conduit from the panel to the future EV parking spot. For the purposes of this section, the dedicated panel capacity for EV capable parking spaces shall be sized using Level 2 charging requirements.

- (5) **GREEN VEHICLE.** A vehicle designed to operate on fuels other than gasoline or diesel for reduced emissions. Examples of alternative fueled vehicles include those that run on electricity (electric or plug-in hybrid), compressed natural gas (CNG) or E85 (a mixture of about 85% ethanol and 15% gasoline).

Section 2. Section 15-291 is amended by establishing a new subsection (i) to read as follows:

(i) All developments, including residential and non-residential, approved after _____ shall include electric vehicle infrastructure in accordance with the standards of this subsection.

When the determination of the number of parking spaces required results in a requirement of a fractional space, any fraction of one-half or less may be discarded, while a fraction in excess of one-half space shall be counted as one parking space.

- (1) Requirement for EV charging stations.
 - a. In parking lots where the number of parking spaces required by subsection (g) is greater than 35 spaces, EV charging stations shall be installed in at least 3 percent of the spaces, with a minimum of two spaces.
 - b. Parking spaces equipped with EV charging stations shall be reserved for electric and plug-in hybrid vehicles only; no other vehicles may be parked in these spaces.
 - c. At least one EV charging station shall be installed in a parking space that is ADA compliant. This space shall be in addition to whatever ADA spaces are otherwise required on the site.
 - d. EV charging stations shall provide Level 2 charging capacity or greater.
 - e. EV charging stations shall meet the standards for electrical connectors: SAE Surface Vehicle Recommended Practice J1772 or SAE Electric Vehicle Conductive Charge Coupler for compatibility with all types of chargers.
 - f. Each EV charging station shall be provided with signage listing the voltage and amperage levels, the available times of use, information relating to fees and/or other safety information. Signage and pavement markings shall comply with MUTCD standards.
 - g. Informational signage to guide motorists to the charging stations and/or other signage including website links and/or QR codes for information on energy, greenhouse gas emissions, or related data may be installed so long as the height or placement does not interfere with circulation or sight distances within the parking area or the entrance/exit of the parking facility.
- (2) Requirement for EV capable charging stations.
 - a. At least 20 percent of the total number of parking spaces required by subsection (g) shall be made EV capable.
 - b. Electrical panels labeled “EV capable” shall be provided at each parking space.
- (3) Residential subdivisions of fifteen or more dwelling units, subject to the open space and recreation facilities requirements of Article XIII of this chapter, shall provide at least one parking space with an EV charging station and one parking space with EV capable infrastructure at all common areas where parking is provided.
 - a. At least one EV charging station shall be installed in a parking space that is ADA compliant. This space shall be in addition to whatever ADA spaces are otherwise required on the site.

- b. If only one parking space is provided at the common area, it shall be equipped with EV capable infrastructure.
- c. All EV infrastructure and associated signage shall be maintained by the Homeowners Association in accordance with section 15-201.

Section 3. All provisions of any Town ordinance or resolution in conflict with this ordinance are repealed.

Section 4 This ordinance is effective upon adoption.