



## EV Charging Station Plan Review Requirements

City of Myrtle Beach, Construction Services

921 N Oak St, Myrtle Beach 29577 (843) 918-1111

[www.cityofmyrtlebeach.com](http://www.cityofmyrtlebeach.com)

### Overview

This document is intended to be a guide for the permitting of EV charging stations and may not contain all requirements needed to obtain permits and approval from the City of Myrtle Beach. Email any specific questions to [planreviewer@cityofmyrtlebeach.com](mailto:planreviewer@cityofmyrtlebeach.com).

### The following are minimum requirements for plan review:

- Completed building permit application and electrical permit application.
- Site plan, if applicable.
- Tree Statement.
- HOA approval letter if installing in a residential HOA community or landlord approval.
- CAB approval for all ocean front single-family, multi-family and all commercial projects, if station is located outside of a building (see our website for CAB requirements).

### Electrical Plans:

In addition to the construction documents, include the minimum below for review. Additional electrical requirements may be required once electrical drawings are submitted for official review.

Type of Charging Station(s)	Power Levels (proposed circuit rating)
Level 1	110/120 VAC at 15 or 20 Amps
Level 2	208/240 VAC at 40 Amps
Level 3	277/280 VAC at 400 Amps Max or manufacture's specs
Other (Provide Detail)	Provide Rating

### EV Chargers fed from existing electrical system requirements; provide the following:

- Engineered plans if the charging equipment is 277/480v or greater than 400 amps.
- General note of compliance with NEC 2020 Article 625 Electrical Vehicle Power Transfer System for the electrical installation on the electrical drawing.
- General note for the voltage drop for 3-percent feeders and 3-percent branch circuits, 5-percent total (feeders and branch) on the submitted electrical drawing.
- A one-line diagram showing raceways, conductors and overcurrent protection supplying the new EV chargers.
- Electrical specifications of EV chargers to include UL-2202 and UL-2594 listing and label information.
- Approved fire stopping system for all penetrations of fire rated assemblies.
- Revised existing panel schedule with demand load to now include the new EV chargers circuitry. Provide a panel schedule showing the load, new and existing to be placed on the panel servicing the new EV chargers.

**NEC 2020 Article 220.87 Determining Existing Loads.** The calculation of a feeder or service load for existing installations will be permitted to use actual maximum demand to determine the existing load under all of the following conditions:

- The maximum demand data is available for a 1-year period.
- The maximum demand at 125 percent plus the new load does not exceed the ampacity of the feeder or rating of service.
- The feeder has overcurrent protection in accordance with NEC 240.4 and the service has overload protection in accordance with NEC 230.90.

**EV chargers fed from a new electrical service requirements:**

- In addition to above EV chargers for an existing electrical system, provide an arc fault current calculation, showing the available fault current at the service mains breaker(s).
- Provide grounding detail showing all applicable grounding electrodes and grounding electrode conductor sizes.

**Required Inspections once permits are issued:**

- Rough
- Courtesy Electric (Prepower)
- Final

# CITY OF MYRTLE BEACH BUILDING PERMIT APPLICATION

Job Site/ Physical Address			Building Use <input type="checkbox"/> Commercial <input type="checkbox"/> Residential		Zoning District	Flood Zone
Lot#	Block	Section/ Subdivision		TMS/ PIN		
Owner of Property (Land Records)		Land Records Mailing Address: Utility Billing Address:				Phone
Lessee/Business Name		Mailing Address				Phone
Contractor		Mailing Address			Phone	
					City License #	
					State License #	
Architect/Engineer		Mailing Address			Phone	
					City License #	
					State License #	
Project Contact Name			Email Address			
Scope of Work <input type="checkbox"/> New <input type="checkbox"/> Addition <input type="checkbox"/> Remove/Demo <input type="checkbox"/> Int Repair <input type="checkbox"/> Ext Repair <input type="checkbox"/> Int Alteration <input type="checkbox"/> Ext Alteration						
Description of Work						
CODE YEAR <input type="checkbox"/> IBC <input type="checkbox"/> IRC		Tap Ticket(s)	Sprinkled <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Sprinkler Revisions Required <input type="checkbox"/> Fire Alarm Revisions Required	Type Construction
Occupancy Group						
Total Valuation		Plan Review Fee		Permit Fee		Permit #
Date Received		CAB Approval Date		BZA Approval Date		Property Maintenance/ Stop Work <input type="checkbox"/> Yes <input type="checkbox"/> No
Date Issued						
# Baths	# Bedrooms	# Dwellings	# Bldgs	Total Sq Ft	Heated Sq Ft	Garage/ Storage Sq Ft
						CoveredPorch/ Patio Sq Ft
<p>Pursuant to SC Code 15-3-640, No actions to recover damages based upon or arising out of the defective or unsafe condition of an improvement to real property may be brought more than eight years after substantial completion of the improvement. Per City Ordinance, permits to do electrical, mechanical, gas or plumbing construction shall be issued only to a state licensed mechanical contractor or a certified master tradesman possessing a current business license and City trade card. This permit becomes null and void if work or construction which it authorized is not commenced within 6 months of its issuance, or if work or construction is suspended or abandoned for a period of 6 consecutive months at any time after it is commenced. This permit does not grant any right or privilege to erect any structure or to use any premises herein described for any purpose or in any manner prohibited by the Zoning Ordinance of the City of Myrtle Beach.</p> <p>Sec 1702.A.1. <i>Minimum finished floor elevation (FFE).</i> All structures, not located in a special flood hazard area, shall have the lowest floor and all mechanical or electrical equipment, such as compressors, air conditioning units, etc., elevated no less than 18 inches above the highest crown of any abutting street or, at the owners' option, twenty-four inches above the average grade of the lot. Final site grading shall insure that ponding of storm water will not occur beneath the building not nearer than three feet from the building's perimeter or any mechanical or electrical equipment. All existing structures, not in a special flood hazard area, will be permitted to expand at the existing FFE.</p> <p>If finished floor elevation not known, please initial the preceding statement: _____</p> <p><i>I hereby certify that I have read and examined, or have had read to me, this application and understand this application to be true and correct. Compliance with all provisions of laws and ordinances governing this type of work shall be assured whether specified herein or not. The granting of this permit does not presume to give authority to violate or cancel the provision of any federal, state or local laws regulating construction, or the performance of construction.</i></p>						
Signature of Owner or Authorized Agent (Contractor)			Printed Name		Phone	Fax
Company			Email Address			

## Project Approvals

Department	Required	Staff
Zoning	<input type="checkbox"/>	
Flood	<input type="checkbox"/>	
Building	<input type="checkbox"/>	
Electrical	<input type="checkbox"/>	
Plumbing	<input type="checkbox"/>	
Landscaping	<input type="checkbox"/>	
Engineering	<input type="checkbox"/>	
Planning	<input type="checkbox"/>	
Fire	<input type="checkbox"/>	
Addressing	<input type="checkbox"/>	
Business License	<input type="checkbox"/>	

## Required Permits

Permits	Permit Number
<input type="checkbox"/> Building	
<input type="checkbox"/> Electrical	
<input type="checkbox"/> Mechanical	
<input type="checkbox"/> Plumbing	
<input type="checkbox"/> Gas	
<input type="checkbox"/> Fire Alarm	
<input type="checkbox"/> Sprinkler	
<input type="checkbox"/> Supp System <input type="checkbox"/> Hood	
<input type="checkbox"/> NFUS <input type="checkbox"/> US <input type="checkbox"/> DW	
<input type="checkbox"/> Pool	
<input type="checkbox"/> Fence	

## Office Notes



## CITY OF MYRTLE BEACH TRADE PERMIT APPLICATIONS

PLUMBING PERMIT APPLICATION		
NO	TYPE OF FIXTURE OR ITEM	FEE
	WATER CLOSETS (TOILETS)	
	BATHTUB	
	LAVATORY (WASH BASIN)	
	SHOWER	
	KITCHEN SINK AND DISPOSAL	
	DISHWASHER	
	LAUNDRY TRAY	
	CLOTHES WASHER	
	WATER HEATER	
	URINAL	
	DRINKING FOUNTAIN	
	FLOOR DRAIN	
	UTILITY SINKS	
	ICE MACHINES	
	GREASE INTERCEPTORS/OR TRAPS	
	VACUUM BREAKERS/HOSE BIBS	
	SEWER	
	PERMIT FEE	
	TOTAL FEE	

CONTRACTOR:

ADDRESS:

CONTACT AND PHONE:

TOTAL JOB VALUE:

CITY LIC. NO.

STATE LIC. NO.

PERMIT NO.: P

DATE ISSUED:

\_\_\_\_\_  
*Signature of Applicant (Please Print Name)*

GAS PERMIT APPLICATION		
NO	TYPE OF FIXTURE OR ITEM	FEE
	GAS HOOKUPS PER APPLIANCE	
	PERMIT FEE	
	TOTAL FEE	

CONTRACTOR:

ADDRESS:

CONTACT AND PHONE:

TOTAL JOB VALUE:

CITY LIC. NO.

STATE LIC. NO.

PERMIT NO.: G

DATE ISSUED:

\_\_\_\_\_  
*Signature of Applicant (Please Print Name)*

ELECTRICAL PERMIT APPLICATION		
NO	TYPE OF FIXTURE OR ITEM	FEE
	RECEPTACLES	
	SWITCHES	
	LIGHTS	
	RANGES AND OVENS	
	DRYER (CLOTHES)	
	WATER HEATER	
	AIR CONDITIONER(S)	
	HEAT	
	SUB PANEL	
	TEMPORARY SERVICE	
	COMMERCIAL OR RESIDENTIAL METER(S)	
	PERMIT FEE	
	TOTAL FEE	

CONTRACTOR:

ADDRESS:

CONTACT AND PHONE:

TOTAL JOB VALUE:

CITY LIC. NO.

STATE LIC. NO.

PERMIT NO.: E

DATE ISSUED:

\_\_\_\_\_  
*Signature of Applicant (Please Print Name)*

MECHANICAL PERMIT APPLICATION		
NO	TYPE OF ITEM	FEE
	CENTRAL AC UNIT/HEAT PUMP	
	DUCTWORK	
	HOOD INSTALL (BF PERMIT FOR SUPPRESSION SYSTEM)	
	TOTAL FEE	

CONTRACTOR:

ADDRESS:

CONTACT AND PHONE:

TOTAL JOB VALUE:

CITY LIC. NO.

STATE LIC. NO.

PERMIT NO.: M

DATE ISSUED:

\_\_\_\_\_  
*Signature of Applicant (Please Print Name)*

JOB SITE: \_\_\_\_\_

JOB SITE ADDRESS: \_\_\_\_\_

TMS/PIN: \_\_\_\_\_

MASTER PERMIT #: \_\_\_\_\_

Email: \_\_\_\_\_

**Please check one:**    ☐ No Subs    ☐ Subs (attach list)    ☐ May Use Subs (attach list)

**Construction Services, 921 N Oak St, Myrtle Beach, SC 29577 Ph: 843-918-1111**

**Remit to: [permittech@cityofmyrtlebeach.com](mailto:permittech@cityofmyrtlebeach.com) or fax 843-918-1158**



## Tree Statement

Construction Services  
City of Myrtle Beach

843-918-1111

[www.cityofmyrtlebeach.com](http://www.cityofmyrtlebeach.com)

921 N Oak St, Myrtle Beach, SC 29577

Project Address: \_\_\_\_\_

Horry County PIN or TMS #: \_\_\_\_\_

Name of Property Owner: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Type of Construction:    ☐ Commercial    ☐ Multi-family    ☐ Residential

New Construction, Additions, Pools, Fences or Accessory Structures  
(Check all that apply and sign below)

\_\_\_\_\_ Tree survey combined with the proposed site plan, drawn and sealed by a registered surveyor, showing the location, type and diameter of the tree in accordance with City of Myrtle Beach Zoning Code Section 903.H. Trees to be removed due to proposed construction should be clearly labeled on site plan.

\_\_\_\_\_ There are no trees on the property.

\_\_\_\_\_ Proposed construction will not affect any trees on the property; tree protection must be in place for all remaining trees. Inspection must be performed prior to plan approval; contact Charles Rowe at 843-918-1179 or [crowe@cityofmyrtlebeach.com](mailto:crowe@cityofmyrtlebeach.com)) or Matt Brooks at 843-918-1166 or [mbrooks@cityofmyrtlebeach.com](mailto:mbrooks@cityofmyrtlebeach.com).

\_\_\_\_\_  
Signature of Applicant (Owner or Authorized Agent)

\_\_\_\_\_  
Printed Name of Applicant

\_\_\_\_\_  
Date

CITY OF MYRTLE BEACH  
COUNTY OF HORRY  
STATE OF SOUTH CAROLINA

TO AMEND SECTIONS 203 TO DEFINE ELECTRIC  
VEHICLE CHARGING STATIONS AND 1502 TO  
ALLOW ELECTRIC VEHICLE CHARGING  
STATIONS AS ACCESSORY USES WITH  
CONDITIONS.

**IT IS HEREBY ORDAINED** that Section 203 of the Code of Ordinances, City of Myrtle Beach, Appendix A Zoning is hereby amended by adding a new definition for Electric Vehicle Charging Stations which reads as follows:

**Electrical Vehicle Charging Stations (EVCS):** A public or private parking space that is served by level 1, level 2, and/or level 3 battery charging station equipment including but not limited to power cabinets, conduit/wiring, structures, machinery, and equipment integral to supporting an electric vehicle for the purpose of transferring electric energy to a battery or other energy storage device in an electric vehicle.

**EV Charging Station, Level 1:** Level 1 provides charging through a 120 volt (V), alternating-current (AC) plug. Level 1 is considered as slow charging. Level 1 charging equipment is standard on vehicles and therefore does not require the installation of charging equipment.

**EV Charging Station, Level 2:** Level 2 charging is through a 240V, AC plug and requires installation of home charging or public charging equipment. These units require a dedicated 40 amp circuit.

**EV Charging Station, Level 3/Direct Current Fast Charging (DCFC):** • Level 3 or DCFC charging is through a 480V, direct-current (DC) plug.

**IT IS FURTHER ORDAINED** that Section 1502 of the Code of Ordinances, City of Myrtle Beach, Appendix A Zoning is hereby amended by adding a new subsection as follows:

**1502.X.** Level 1 and 2 EV Charging Stations can be an accessory use for all permitted uses/zoning districts and level 3 EV Charging Stations can be an accessory use for all permitted uses/zoning districts except for residential uses in the City of Myrtle Beach with the following conditions:

1. Parking provided for the purpose of EV Charging Stations must meet the requirements as outlined in Article 10, Parking and Loading Requirements.
2. EV charging cabinets and other infrastructure components commonly used in providing EV charging, excluding the individual EV charging stations, must be set back a minimum of 10 feet from any property line.
3. EV charging cabinets and other infrastructure components commonly used in providing EV charging, excluding the individual EV charging stations and cabinets interior to a permitted building, must provide adequate landscape screening in addition to the following:
  - A minimum of one shrub, at least 18 inches tall immediately after planting, per three linear feet of perimeter around the area of the EV charging cabinets.

- This ordinance will take effect upon second reading.

ATTEST:

1<sup>st</sup> Reading: 2-14-2023

2<sup>nd</sup> Reading: 2-28-2023