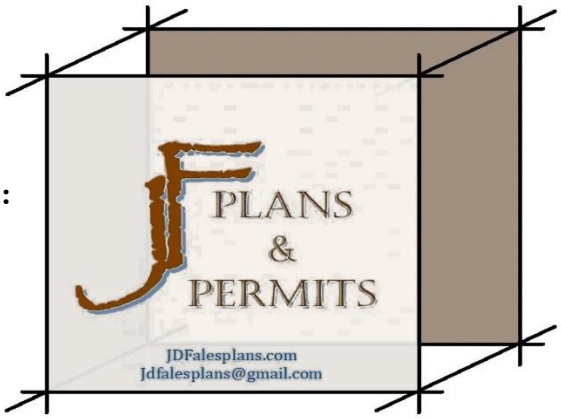

Single line wiring diagram for a residential EV charger installation:

Main Components

* Main Service Panel

* EV Charger Circuit Breaker

* Conductors

* EV Charging Station

Diagram Description

1. The diagram would start with the main service panel, typically represented by a rectangle[1][5].

2. From the main panel, a line would extend to represent the dedicated circuit for the EV charger. This line would be labeled with the appropriate voltage (typically 240V for a Level 2 charger)[2].

3. The circuit breaker for the EV charger would be shown, usually a double-pole breaker rated at 40-60 amps, depending on the charger's requirements[1][5].

4. The conductors would be represented by lines extending from the breaker to the EV charging station. These would typically be labeled with the wire gauge (e.g., #6 AWG for a 50A circuit)[2][5].

5. The diagram would show two hot wires (usually colored red and black), a neutral wire (white), and a ground wire (green)[4][5].

6. The EV charging station would be represented at the end of the circuit, typically shown as a rectangle or a specific symbol for an EV charger[2].

7. Any intermediate junction boxes or conduits would also be represented along the path from the main panel to the charger[3].

8. The diagram would include labels for amperage, voltage, and wire sizes[2].

Remember that while this description provides a general outline, actual diagrams may vary based on specific installation requirements and local electrical codes. It's crucial to consult with a licensed electrician or obtain proper permits before proceeding with any electrical work[1][3][5].

Citations:

[1] https://www.reddit.com/r/teslamotors/comments/nrt8x6/need_some_help_with_singleline_wiring_diagram_for/

[2] https://www.ny-engineers.com/hubfs/Sample%20Work/EV/EV_Drawing_Commercial.pdf

[3] https://condoit.io/behind-every-ev-charger-installation-is-a-single-line-diagram/

[4] https://www.youtube.com/watch?v=mc_HU-7V2UQ

[5] https://www.kiaevforums.com/threads/diy-ev-charger-installation-need-help.4335/