

EV Charger Installation Quote - Shorewood, WI

Project Overview:

This project involves the installation of an EV charger in the garage of a residential property located in Shorewood, WI. The charger will be located on the side wall of the garage, with conduit run underground through the yard to an existing electrical box located behind a window near the house. Existing infrastructure will need to be modified or replaced to accommodate the new charger.

Key Challenges:

- Running conduit underground through the yard presents potential complications related to landscaping, existing utilities, and soil conditions common in Shorewood.
- The proximity of the electrical box to the house may require careful coordination to minimize disruption to existing systems.

Step-by-Step Project Plan:

Phase 1: Site Preparation and Conduit Installation:

- Description: Excavate a trench from the garage to the electrical box, ensuring proper depth and distance from existing utilities. Install 20 feet of 1-inch Schedule 40 PVC conduit and secure it in the trench.
- Estimated Time: 4-6 hours
- Tools/Equipment: Shovel, trenching tools, conduit bender, cable puller, pipe sealant.

Phase 2: Electrical Connections:

- Description: Connect conduit to the electrical box, run 20 feet of 10-gauge THHN wire to the garage location, and install the EV charger. Install a 40 amp circuit breaker in the existing panel to power the charger.
- Estimated Time: 4-6 hours
- Tools/Equipment: Wire strippers, crimping tools, electrical tape, voltage tester, drill, wire connectors, junction box, conduit clamps.

Phase 3: Testing, Inspection & Yard Restoration:

- Description: Perform thorough testing of the EV charger and electrical connections. Clean up the work area and complete final inspections with the city of Shorewood. Repair and restore the trench area to its original condition, including backfilling with topsoil, re-seeding, and replacing any damaged landscaping.
- Estimated Time: 3-4 hours
- Tools/Equipment: Multimeter, circuit breaker tester, safety equipment, shovel, topsoil, grass seed, fertilizer, landscaping tools.

Materials List:

Phase 1:

- Conduit (20 ft) - \$5 per ft (Schedule 40 PVC) - \$100
- Conduit Fittings (as needed) - \$5 each - \$20
- Cable Puller - \$30
- Pipe Sealant - \$15

Phase 2:

- Electrical Wire (20 ft) - \$1.50 per ft (10-gauge THHN) - \$30
- Grounding Wire (20 ft) - \$1 per ft - \$20
- Junction Box - \$25
- Conduit Clamps - \$10
- EV Charger (Level 2, 30 amp) - \$700
- Circuit Breaker (40 amp, double pole) - \$50

Phase 3:

- Electrical Tape - \$10
- Wire Strippers - \$20
- Crimping Tools - \$30
- Topsoil (as needed) - \$5 per bag - \$20
- Grass Seed - \$10
- Fertilizer - \$15

Labor Estimate:

- Master Electrician: 12-16 hours - \$100 per hour - \$1200 - \$1600
- Journeyman Electrician (as needed): 4-8 hours - \$80 per hour - \$320 - \$640

Existing Electrical Panel Details:

Based on the video review, the existing electrical panel has 20 breaker slots. The main breaker is 200 amps. This provides ample capacity to accommodate a 40-amp circuit for the EV charger. Shorewood Permits and Building Codes:

The City of Shorewood requires permits for electrical work. The cost of these permits, inspections, and associated fees is estimated at \$200. Shorewood building codes generally follow the National Electrical Code (NEC) and may have additional local requirements. We will ensure full compliance with all applicable codes and regulations.

Total Cost Estimate:

- Materials: \$975
- Labor: \$1520 - \$2240
- Permits and Inspections (Shorewood): \$200
- Yard Restoration: \$100
- Contingency (10%): \$222.50 - \$313

Total Estimated Cost: \$3017.50

Disclaimer: This quote is an estimate based on the information provided and average pricing for Shorewood, WI. Actual costs may vary depending on site conditions, specific materials chosen, and unforeseen complications.

Next Steps:

Please review this quote and provide any additional information requested. We can then schedule a site visit to perform a more detailed assessment and provide a final quote.

Competitive Advantages:

We are a licensed and insured electrical contractor with experience in EV charger installations in Shorewood. We are committed to providing our clients with high-quality work and exceptional customer service.

Warranty and Guarantee:

We offer a 1-year warranty on all labor and materials used in the EV charger installation. We also provide ongoing maintenance and support for your electrical systems.

We hope this quote helps you make an informed decision about your EV charger installation project. We look forward to working with you!