



An Extended Guide · No. 1566

Your Ground-Mount Solar Game Plan

A calm, step-by-step way to begin

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! Read this first — two honest truths about ground-mount solar

Two honest truths before we start, because they surprise a lot of good folks. First, a ground-mounted solar array is a professional job. It takes a licensed installer, real foundation work in your yard, building and electrical permits, and your utility's approval to connect (that approval is called interconnection). This guide is here to help you understand, plan for, and evaluate a ground mount; it is not a do-it-yourself project, and I never want you digging footings, wiring an array, or opening an electrical panel. Second, a plain grid-tied solar system — roof or ground, without a battery — shuts itself off during a power outage, even in bright sunshine. That is a required safety feature, so the system cannot put electricity onto the lines while the crews are repairing them. If keeping the lights on during an outage matters to you, you will need a battery, and we will talk about that plainly. If the whole idea of ground-mount solar feels like a lot, take a breath — this guide breaks it into a calm, orderly set of steps you can take one at a time, at your own pace.

Your calm, step-by-step game plan

Maybe you've read a few of these guides, or maybe you're just starting out and feeling a little overwhelmed. Either way, this is the one that ties it all together — a friendly road map from 'I'm curious' to 'my system's running,' with nothing skipped and nothing rushed.

I'm Bill, and I run Bill's Home Tech here in Portage County, Ohio. For 30-plus years I've walked folks through big home decisions in plain, unhurried language, and this one is no different. You don't need to become an expert. You just need a sensible order to go in, and a friend who'll help you understand each step.

I don't sell solar and I earn nothing from any installer, so every step here is aimed squarely at what's best for you. Let's lay out the whole journey, calmly, and point you to the right guide whenever you want to go deeper on a piece of it.

★ Feeling unsure where to even start?

That's the most normal feeling in the world, and it's exactly what I'm here for. Give me a call and we'll figure out your first step together — no pressure, no sales pitch. Call or text me at (330) 200-8042.

The whole game plan, on one page

If you read nothing else, read this. Here's the entire journey in a handful of calm steps.

- ❑ Take stock of your land, your sun, and what's shading you.
- ❑ Get clear on your goal: lower bills, outage backup, or both.
- ❑ Learn just enough of the basics to follow a proposal.
- ❑ Gather your info and get a few quotes from licensed local installers.
- ❑ Understand the permits and your utility's approval to connect.
- ❑ Choose a good installer, then let the pros build it to code.
- ❑ Settle in: a little easy upkeep, and room to grow when you're ready.

✓ One step at a time is the whole secret

You'll never face all of this at once. Each step is small and doable on its own, and by the time you reach the next one you'll be ready for it. That's how every big project gets done — gently, in order.

Step 1: Take stock of your land and sun

Everything starts with your property. Before any of the technical talk, just get a feel for what your place offers the sun.

Wander your yard and notice where the sun falls through the day and across the seasons. Look for an open, sunny patch clear of the shadows of the house, the trees, and the outbuildings — and think about whether a growing tree might shade it in years to come. Notice, too, how far a good spot sits from your electrical panel.

You don't need instruments or measurements — a good installer brings those. You're just forming a picture. Our siting guide goes deep on finding the sunniest, most sensible spot, and our ground-mount-versus-roof guide helps you weigh whether the yard beats the roof for your home in the first place.

✓ Trust your eyes and your knowledge of your land

Nobody knows your property like you do — where it's soggy in spring, where the sun lingers, where the wind whips through. That everyday knowledge is genuinely useful, so bring it to the conversation.

Step 2: Get clear on your goal

Solar can do more than one job, and knowing which one you're after shapes every choice that follows. So let's name it early.

Most folks want one of three things. Some mainly want to lower their electric bills — for that, panels alone may do. Some want backup power when the grid goes down — and for that you need a battery, because plain grid-tied solar shuts off in an outage. And plenty want both: savings day to day, and peace of mind when the lights flicker.

There's no wrong answer, but being honest about your goal keeps you from over-buying or under-planning. Our interconnection guide explains why plain solar goes dark in an outage, and our expanding-and-batteries guide covers backup — both worth a look as you settle on what you want.

✓ Say your goal in one sentence

Try finishing this: 'I mostly want solar so that _____. ' Whether it's lower bills, keeping the well pump running in an outage, or both, that one sentence will guide every good decision from here on.

Step 3: Learn just enough to follow along

You don't need to become an engineer. You just need enough of the vocabulary to read a proposal and ask good questions.

A little grounding goes a long way toward feeling confident instead of talked-down-to. It helps to know, in plain terms, what the parts are and what holds the array up, and to know the main kinds of racks so you can picture what would sit in your yard.

Our parts-of-a-system guide gives you a plain tour of the pieces, our foundations guide explains what anchors an array to the earth, and our fixed-adjustable-and-pole guide compares the rack families. Skim whichever ones interest you — enough to follow along is plenty.

✓ Understanding beats memorizing

You're not studying for a test. The goal is simply to nod along knowingly when an installer explains their plan, and to spot when something doesn't add up. A little understanding buys a lot of confidence.

Step 4: Gather your information

A little paperwork gathered now makes every installer conversation faster, fairer, and more accurate.

Pull together a recent stretch of your electric bills so an installer can see how much power you actually use through the year — that's the starting point for sizing anything. It also helps to know the basics about your property: roughly where your lines run, who your utility is, and whether you're on a well or city water.

If you belong to a homeowners' association, dig out its rules, and if you know your township, a good installer will handle the local requirements from there. None of this is hard to assemble, and having it ready lets the quotes you get be real and comparable.

✓ A simple folder does the trick

Start a folder — paper or on your computer — with your bills, your utility's name, and any HOA rules. As proposals and permits come in, they have a home. Future-you will be grateful for the tidiness.

Step 5: Get quotes and choose an installer

This is the big one — the person you hire matters more than any single part. Take your time and choose well.

Reach out to a few licensed local installers who have real experience with ground mounts, and ask each for a written proposal for the same job. Comparing a few tells you the honest middle of the market and shows you who explains things clearly. Look for licensed, insured, and bonded, a solid local track record, and no high-pressure sales.

Our choosing-an-installer guide is a whole deep-dive on exactly this — green flags, red flags, the questions to ask, and how to spot the pushy door-knockers to avoid. It's worth reading in full before you sign anything, because a good installer makes the whole rest of the journey smooth.

! Never sign under pressure

If an installer pushes you to sign today, quotes a 'today only' price, or knocks on your door uninvited, slow right down. Honest pros give you time to think. Get a few quotes, sleep on it, and never hand over a big deposit on the spot.

Step 6: Understand the money honestly

Cost matters, of course — and the honest way through it is to get real numbers from real quotes, not guesses from anyone, me included.

A ground mount usually costs more to build than a roof mount, because it needs its own structure, footings, and often a trench. What it costs for you depends on your soil, your distance from the house, the size, and the design — which is exactly why a real quote is the only honest number. You'll notice I've put no prices in any of these guides on purpose.

Our cost-versus-roof guide frames the whole money picture without guessing a figure. For financing and any tax credits or incentives, lean on your installer and a tax professional, and remember incentives change — verify current terms before you count on them.

✓ The real number comes from a real quote

Be wary of anyone — a guide, an ad, a salesperson — who throws out a confident price before seeing your property. Honest figures come from a proper look at your home and your usage. Everything else is guesswork.

Two kinds of homes, two sets of needs

The steps are the same for everyone, but the game plan tilts a bit depending on whether you're in town on a tidy lot or out in the country with land and a well.

If you live in town or the suburbs

In town or the suburbs, the plan centers on making the most of a smaller space and working within local rules. Backup is a nice-to-have, and the yard array, if it fits, will be compact.

- Check HOA rules and township setbacks early — they shape what's possible.
- Weigh roof versus a small ground array; space is the deciding factor.
- City water keeps flowing in an outage, so backup is optional comfort.
- References are likely nearby — ask to see a local ground mount.

If you are out in the country on a well

Out in the country, the plan leans into your land: room to aim the array ideally, room to grow, and a real reason to think about backup, since a well pump stops the moment the grid does.

- Open acreage gives you the pick of the sunniest, least-shaded spot.
- Plan for a longer trench run from a far corner back to the house.
- Put keeping the well pump running high on your backup wish list.
- Confirm your installer will travel to acreage and knows rural rules.

★ Town lot or country acres?

Either way, I'll help you shape a game plan that fits your place and your goals. Tell me about your property and we'll map out your sensible first steps together. Call (330) 200-8042.

Step 7: Permits, setbacks, and the utility

Two separate approvals stand between a plan and a working system. The good news: your installer handles both, so you mostly need to understand them.

First come the building and electrical permits and the setbacks that keep the array a proper distance from your property lines — plus the inspection at the end. Second, and entirely separate, is your utility's interconnection: their formal approval to connect your array to the grid, along with any meter change. You can't switch on until that's granted.

Our permits-and-setbacks guide walks through the paperwork that keeps it legal and safe, and our interconnection guide covers the utility's approval and why plain solar goes dark in an outage. Your installer shepherds both — if one ever offers to skip a permit, that's your cue to walk away.

✓ Approvals are a feature, not a hassle

Permits, inspection, and the utility's sign-off exist to keep your system safe, legal, and sound. They're a normal part of every good install, and a reputable installer treats them as routine, never as corners to cut.

Step 8: The foundation and the trench

This is where the yard work happens — the real construction that sets a ground mount apart from a roof job. It's all pro work.

Your array needs a foundation set to hold it steady for decades — driven posts, concrete footings, ground screws, or ballast, chosen by the installer and engineer to suit your soil, frost, and site. Then the power has to travel back to the house, usually through an underground trench in conduit, dug at a code depth and restored afterward.

Our foundations guide explains what anchors an array to the earth, and our trenching guide covers the run back to the house — including calling 811, the 'call before you dig' service, to locate buried utilities before any digging begins. You don't do any of this yourself; you understand it and let the pros build it.

! The digging and wiring are strictly pro work

Foundations, trenching, and every electrical connection are for the licensed crew, done to code and inspected. Never dig, wire, or build any of it yourself — and remember, 811 must be called before a shovel goes in the ground. Your role is to understand and evaluate, not to build.

Step 9: What to expect on install day

By the time the crew arrives, the hard decisions are behind you. Here's roughly how the build itself tends to unfold.

After the site is marked out and utilities located, the crew sets the foundation, builds the frame, and mounts the panels. They run the wiring back to your house — trenching it underground — and tie it into your electrical system with the proper disconnects and, if you've chosen one, a battery. It may take a day or several, depending on the size and the ground.

You don't need to do anything but stay clear of the work and be reachable for questions. A good crew keeps you informed, tidies up after themselves, and leaves your yard in good order. It's genuinely satisfying to watch your array take shape.

✓ Ask for a walk-through when it's done

When the crew finishes, ask them to show you your monitoring, point out the disconnects, and explain what to watch for. A few minutes then saves many questions later — and our common-problems guide has your back after that.

Step 10: Inspection and switch-on

One last pause before the power flows: the inspection and the utility's go-ahead. It's worth the short wait.

Once the array is built, it's inspected to confirm the work is safe and up to code. Then your utility gives its final permission to operate and swaps or programs the meter as needed. Only after that green light does the system switch on and start doing its job. It's the same careful sequence that protects every solar home.

There can be a bit of waiting between finishing the build and flipping the switch, and that's normal — it's paperwork and scheduling, not a problem. Your installer manages it and lets you know when you're cleared to go live. Then, at last, you're a solar household.

✓ The wait to switch on is normal

Don't fret if there's a gap between the crew leaving and the system going live. Inspections and utility approvals run on their own schedule. Your installer is on it, and the day you're switched on is worth the small wait.

Step 11: Settling into living with it

Here's the best part: once it's running, a ground array asks very little of you. Mostly you just enjoy it.

Day to day, solar quietly does its work. A ground mount's easy reach makes the little upkeep simple — an occasional glance over the frame and glass, keeping grass and weeds from shading the low edge, and letting monitoring keep watch. In winter, smooth tilted panels often shed snow on their own, and you can gently clear them from the ground if you like.

Our maintenance-and-access guide lays out an easy seasonal rhythm, our snow-and-winter guide covers the cold months, and our common-problems guide helps you tell a harmless quirk from a reason to call. Lean on them whenever a question comes up — that's what they're for.

✓ Low fuss is the whole reward

After all the planning, living with solar is refreshingly uneventful. A few easy habits, a glance now and then, and your array hums along for decades. You did the hard part up front; now you get to enjoy it.

Step 12: Leave room to grow

Your first system doesn't have to be your last word. One of the joys of a ground mount is how gracefully it can grow.

Needs change — a new electric car, a battery after one too many outages, another row of panels as the family grows. On open land, adding on is often straightforward, especially if your installer designed the first phase with the future in mind. The cheapest time to plan for growth is at the very start.

Our expanding-and-batteries guide covers planning ahead in full — leaving room, sizing equipment with headroom, and adding a battery later for backup. Even if you build modestly now, a few words with your installer about someday keeps your options open and affordable.

✓ Plant the seed at the start

You don't have to build big now. Just mention any future hopes when you first go solar, so today's system leaves room for tomorrow's. That one conversation can save real money down the road.

One thread runs through it all: safety

If there's a single idea that binds this whole series together, it's this — a ground-mount solar array is a professional install, from first footing to final connection.

I've said it in every guide, and I'll say it once more here, because it matters most: this is not a do-it-yourself yard project. The foundations, the wiring, the trench, the battery, and the utility connection are all licensed, permitted, inspected work. That's not red tape — it's what keeps your family and your home safe for decades.

Your job through all of it is a wonderful one: to understand, to plan, to choose a good installer, and to enjoy the result. You never have to climb a roof, dig a footing, or touch a wire. Leave the hands-on work to the pros, and let these guides make you a confident, well-informed owner.

! Understand and evaluate — never DIY the build

Please never attempt the foundations, the wiring, a battery, or the utility connection yourself. Every bit of the build is licensed pro work, done to code and inspected. Your role is to understand it and choose well — and that role is exactly what keeps everyone safe.

The whole series, at a glance

Think of these guides as a friendly bookshelf you can pull from whenever a question comes up. Here's the lay of the land.

- Starting out: our ground-mount-versus-roof guide and our siting guide.
- The build: the parts-of-a-system, foundations, rack-types, and trenching guides.
- The rules: our permits-and-setbacks guide and our interconnection guide.
- Living with it: the maintenance, snow-and-winter, and common-problems guides.
- Country matters: our well-pump, animals, and outbuildings guides.
- Money and hiring: our cost-versus-roof and choosing-an-installer guides.
- Growing: our expanding-and-batteries guide — and this game plan to tie it together.

You needn't read them all, and certainly not in one sitting. Reach for whichever one matches the question in front of you, and come back to this game plan whenever you want to see the whole path again.

How I fit in, from start to finish

Across this whole journey, my role stays the same: the patient neighbor in your corner, with nothing to sell and no dog in the fight.

I don't sell solar, install it, or take a cut from anyone who does. What I do is help you understand each step, read the proposals, ask the right questions, and line up a trustworthy local installer to do the licensed work. From your first curious question to settling in years later, I'm a steady hand you can call.

Some folks want me at the kitchen table for the big decisions; others just call now and then when something puzzles them. Either way, you never have to face a proposal, a pushy salesperson, or a worry about your array alone. That's the whole point of what I do.

★ A guide for the whole journey

Wherever you are — just curious, weighing quotes, or living with a system and wondering about something — I'm glad to help. A first visit is a flat \$99, and a screen-share is often just \$49. Call or text me at (330) 200-8042.

You've got this

Let me leave you with a bit of reassurance, because you've earned it just by reading this far.

Going solar can feel like a mountain when you look at the whole thing at once. But you're not climbing it in a single leap — you're taking one sensible step, then the next, with good installers doing the hard parts and good guides at your elbow. Plenty of folks just like you have done exactly this and are glad they did.

Go at your own pace. Ask every question that comes to mind — there's no silly one. Lean on these guides, lean on a good installer, and lean on me when you'd like a second opinion. The path is well-worn and friendly, and you don't have to walk it alone.

✓ Progress, not perfection

You don't need to have it all figured out today. You just need to take the next small step when you're ready. Do that, and one day soon you'll look out at your own array and wonder why it ever felt daunting.

Common Questions

The questions I hear most from folks just beginning their ground-mount journey.

Q: Where do I even start?

Right where this guide does: take stock of your land and sun, and get clear on your goal — lower bills, backup, or both. Everything else follows naturally from those two, and you can lean on the other guides as each step arrives.

Q: How long does the whole process take?

It varies, so I won't guess. There's the time you take to choose an installer, then permitting, the build, inspection, and the utility's approval to switch on. Your installer can give you a realistic timeline once you've picked a plan.

Q: Do I have to understand all the technical parts?

Not at all. You need just enough to follow a proposal and ask good questions — which these guides give you. The deep technical work is the installer's job; your job is to understand enough to choose wisely.

Q: What's the single most important step?

Choosing a good installer. A licensed, experienced, honest local pro makes the entire rest of the journey smooth. Our choosing-an-installer guide is the one I'd read most carefully before signing anything.

★ Ready to take your first step?

Then let's take it together. Tell me where you are and what you're hoping for, and I'll help you map out a calm, sensible path forward. Call or text me at (330) 200-8042 — there's no pressure and no sales pitch, just help.

Your one-page game plan

Tear this out, tape it to the fridge, and work down it whenever you're ready. One calm step at a time.

- ☐ Walk my land and note the sunniest, least-shaded spot.
- ☐ Decide my goal: lower bills, outage backup, or both.
- ☐ Skim a guide or two to learn the basics I'll need.
- ☐ Gather my bills and property info into one folder.
- ☐ Get a few written quotes from licensed local installers.
- ☐ Choose a good installer and let the pros handle permits and the build.
- ☐ Settle in, keep up the easy upkeep, and plan any future add.

✓ Keep it where you'll see it

A plan on the fridge beats a plan in your head. Check off a step whenever you finish one, and don't rush the next. Steady progress is exactly how this gets done — and you're already started.

You don't have to do this alone

You just have to remember that a friendly, patient person is one call away.

I hope this guide made getting started with ground-mount solar feel a little less daunting and a lot more doable. Keep it in a drawer with your other home papers, come back to a page whenever you need it, and don't worry about memorizing anything.

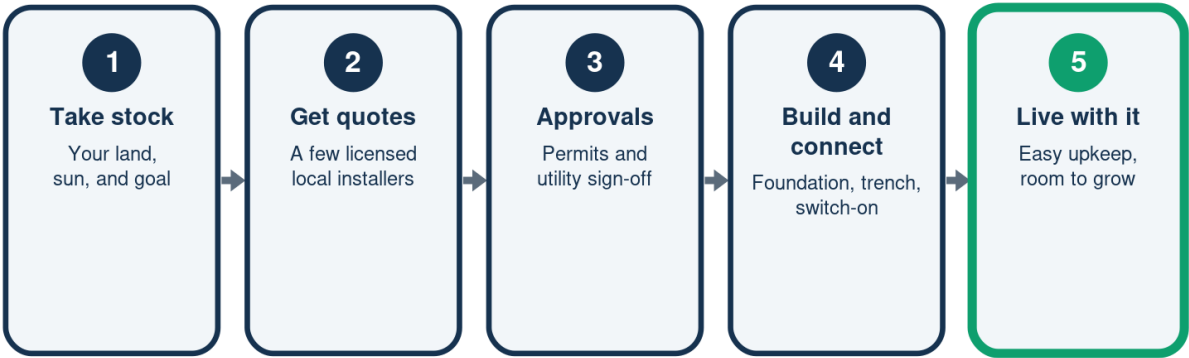
When you'd rather have a hand, that's exactly what I do. I come to your home, work at your pace, and never make you feel rushed or silly for asking. A first visit is a flat \$99, and for the parts that don't need me on-site I can often help right on your screen for \$49. Every visit comes with a 30-day, come-back-free guarantee. I don't sell solar and I don't do the licensed electrical work or the install itself — I help you understand it all, ask the right questions, and line up a trustworthy local solar installer, so you never feel talked into anything.

★ Bill's Home Tech — real help, close to home

Call or text me at (330) 200-8042, or visit BillsHomeTech.com. Serving Atwater and all of Portage County. 30+ years of patient, plain-English tech help — and if you're ever not 100% happy with a visit, I'll make it right or refund it. That's a promise. — Bill

Your Step-by-Step

From curious to switched-on, in calm order



Every step is small on its own -- take them one at a time.



Town Plan vs Country Plan

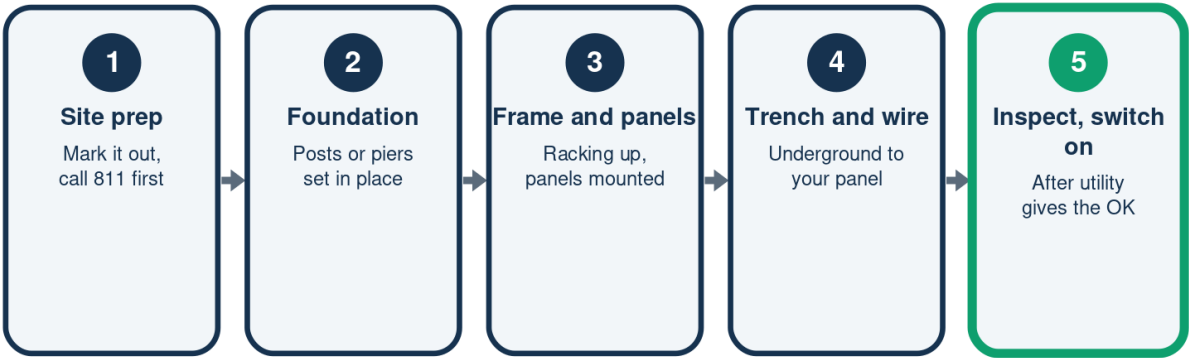
The steps are the same; the emphasis shifts

	In town	In the country
Space	Smaller yard	Open acreage
Rules	HOA, setbacks	Ag, floodplain
Water	City supply	Well pump
Backup	Nice to have	Often vital
Room to grow	Limited	Plenty

Same journey for everyone -- your property tilts the emphasis.

Install Day, Start to Finish

Roughly how the build itself unfolds



All licensed pro work -- you understand it; the crew builds it.



Need a Real Person?

You do not have to remember all of it.
You just have to remember you can call.
Friendly, in-home tech help -- I come to you.

BILL'S PROMISE

If you are not 100% happy with a visit, I will
make it right -- or refund it. No awkwardness,
no fine print. That is how I would want to be treated.

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Bill@BillsHomeTech.com · Mon–Sat 9:00 AM – 7:30 PM

— Bill

Prefer help without a visit?

Bill can screen-share and fix many things remotely — a flat \$49, free for Support Plan members.



A Note From Bill

A quick note from Bill.

I write these guides to make home tech a little less frustrating, and I do my best to keep every step accurate and up to date. Still, every home, device, and setup is a bit different, so I can't promise a guide will match yours exactly or fix your particular problem. These guides are for general information only — they're not professional, legal, or financial advice, and they don't replace your device's own manual or the manufacturer's instructions. Please go slow, use your own good judgment, and use everything here at your own risk. If a step involves electrical wiring, a gas appliance, a water heater, plumbing, or climbing a ladder — or if anything just doesn't feel safe — please stop and call a licensed professional (or give me a call at 330-200-8042). Bill's Home Tech and Bill Davis can't be responsible for any damage, data loss, or injury that comes from using these guides. Thanks for reading, and stay safe out there.

— *Bill*



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