

Brick Retaining Walls: Building Them Right and Fixing Them Wrong

What Separates a Wall That Holds From a Wall That Falls —
and How to Build the First Kind

by Travis Nech

Champion Brick Repair — championbrickrepair.com

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Chapter 1: Brick Retaining Wall Repair Starts With Knowing What You're Actually Repairing

A retaining wall is the hardest-working piece of masonry on your property. A garden wall just has to stand up. A fence wall just has to stand up and look good. A retaining wall has to stand up while a hill tries to push it over, every minute of every day, for decades. It's holding back tons of soil and water, and it never gets a day off.

Most of the failing brick retaining walls I get called to look at in Texas were never built as retaining walls. Somebody needed to hold back a slope or terrace a yard, and they built what they knew how to build — a garden wall. Same shallow footing. Same solid brick face. Same total absence of drainage. Then they piled dirt behind it and waited. The wall did its best for a few years, and then the hill won. Most brick retaining wall repair calls start with that same misunderstanding: the homeowner thinks the wall failed, when really the wall was never built for the job it was given.

This book is about both sides of that story. If you're building a

brick retaining wall, here's how to build it so it holds. If you've got one that's failing, here's how to read what went wrong and fix it so the next one stands. The details are different from garden walls — the forces are bigger, the drainage is non-negotiable, and the cost of getting it wrong is a wall that fails on a schedule.

One thing to get straight before we go further: when I say "brick retaining wall," I mean a wall with a brick face that's doing retaining work. Sometimes that's solid brick all the way through. Sometimes — and this is often the smarter build — it's a structural wall of block or concrete with a brick face on the front. The brick is the pretty part. The structure is what holds the hill. Confusing those two jobs is where most failures start.

Chapter 2: The Job a Retaining Wall Actually Does

Let me put a number on what your wall is fighting, because most people wildly underestimate it.

Dry soil pushes. Wet soil pushes much harder — wet soil can weigh up to 50 percent more than dry soil, and all of that extra weight turns into sideways pressure on your wall. That's the hydrostatic part: water trapped behind a wall doesn't just make the soil heavier, it pushes with its own force, and it never lets up until it finds a way out.

And the pressure doesn't grow gently with height. The sideways force on a wall goes up with the square of the depth. An 8-foot wall isn't holding back twice what a 4-foot wall holds — it's holding back roughly four times as much. That's why a little 2-foot landscape wall can get away with being built simple, and a 4-foot wall built the same simple way is a failure waiting for a rainy season. Every foot of height is a serious step up in engineering.

On top of the soil itself, there's surcharge — the extra load sitting on the ground behind the wall. A driveway, a parked

car, a shed, a patio, even a big pile of mulch: anything heavy sitting on the soil above the wall adds to the push. I've seen retaining walls that were fine for ten years start leaning six months after the homeowner put in a parking pad above them. The wall didn't change. The load did.

So the job description for a retaining wall is: hold back the soil, handle the water, carry the surcharge, and do it through wet years and dry years without moving. A garden wall's job description is: stand up. If you build the first job with the second wall, you get what you get.

Chapter 3: Why So Many Brick Retaining Walls Fail

I've torn down enough failed brick retaining walls to sort the causes into a lineup. Here they are, in the order I see them.

No drainage behind the wall. Ever. This is the number one killer, and it's not close. Wall after wall comes down and there's nothing behind it but native clay packed tight against the brick — no gravel, no drain pipe, no weep holes, no way for water to get out. Every rain, water soaks into the soil behind the wall, the soil gets heavy, the pressure builds, and the wall takes the whole load. Do that for enough rainy seasons and the wall leans, bellies, or falls. The short version from the engineering side: the most common cause of retaining wall failure is trapped water. Everything else is a distant second.

Built like a garden wall. Shallow footing, single wythe of brick, no reinforcement, no batter. A garden wall holds up its own weight and that's it. Put a hill behind it and it's structurally out of its depth from day one. The wall doesn't know it's supposed to be a retaining wall. It just knows the

load is bigger than it was built for.

Footing too shallow for the load. Even when there is a footing, it's often sized for a garden wall — a skim of concrete under a wall that's holding back three feet of wet clay. The footing settles, tilts forward under the load, and the wall goes with it. On our Texas clay, which swells and shrinks with moisture, a shallow footing under a loaded wall is getting worked from both sides: the hill pushing and the clay moving.

Surcharge nobody accounted for. The wall was built for soil. Then came the driveway extension, the hot tub pad, the retaining wall above the retaining wall (terraces multiply the load on the lower wall). The wall that was marginal becomes the wall that's failing.

Water from above. Gutters, downspouts, and grading that dump roof water behind the wall. A single downspout from a big roof section can pour hundreds of gallons behind a wall in one storm. If there's no drainage system to carry it away, that water goes straight into the pressure equation.

Roots. Same story as freestanding walls, with higher stakes. A root under the footing lifts it; a tree drinking from the clay

behind the wall shrinks the soil unevenly. On a loaded wall, any footing movement gets amplified by the hill pushing.

Notice what's not on the list: the brick. The brick is almost never the problem. Brick retaining walls fail because of what's behind them and under them, not because of the brick itself. Which means the fix is almost never "better brick." It's better engineering.

Chapter 4: The Drainage System — The Whole Thing, Not Half

If you take one chapter from this book, take this one. Drainage is the difference between a retaining wall and a future demolition project.

A proper retaining wall drainage system has four parts, and they all have to be there:

1. Gravel backfill behind the wall. A layer of clean, angular crushed gravel — typically 12 to 18 inches thick — placed directly behind the wall, running from near the top down to the footing. Water moves through gravel fast instead of sitting in soil. This is the single most important element. No gravel, no drainage, no matter what else you do.

2. Filter fabric. A geotextile fabric between the gravel and the native soil. Without it, fine clay particles wash into the gravel over the years and clog it — your drain slowly turns back into soil. The fabric keeps the gravel clean and draining for the life of the wall. It's cheap. Skipping it is expensive.

3. A perforated drain pipe at the footing. A rigid or flexible

perforated pipe (drain tile, French drain) buried in the gravel at the base of the wall, running the full length, pitched to carry water to daylight — an outlet at the end, a pop-up emitter, a connection to the storm system, somewhere the water can actually go. A drain pipe with nowhere to drain to is a decoration. The outlets matter as much as the pipe.

4. Weep holes through the wall. Small openings in the bottom course of the wall that let any water reaching the face escape. Standard practice puts them every 5 to 10 feet along the wall, in the lowest course, just above finished grade. On taller walls, a second row higher up. They're the wall's pressure relief valves — the backup for the pipe, and the visible proof the system is working. When you see water weeping out of the weep holes after a rain, that's the system doing its job, not a problem.

Here's what I find behind failed walls instead: native clay backfill (the worst possible backfill — it holds water like a sponge and pushes like a bully), no pipe, no weeps, and sometimes a downspout discharging right into the backfill zone. The wall never had a chance.

The retrofit question: can drainage be added to an existing wall without rebuilding it? Sometimes, partially. You can

excavate behind the wall and install gravel, fabric, and a drain pipe — it's a big dig, but it doesn't disturb the wall face. What you can't do is add weep holes to a wall that doesn't have them without cutting into the brick, and you can't fix a wall that's already leaning or bellied with drainage alone. Drainage stops the pressure from getting worse. It doesn't push a leaning wall back straight. If the wall has already moved, drainage is part of the rebuild, not an alternative to it.

Chapter 5: The Footing — Deeper, Wider, and on Purpose

A retaining wall footing does more work than a garden wall footing, so it has to be more footing.

Depth. The footing has to get below the active clay zone — same rule as freestanding walls, but with higher stakes, because a settling retaining wall doesn't just lean, it loses its fight with the hill. In North Texas, that means 18 to 24 inches minimum for a low wall, deeper as the wall gets taller. And the bottom of the excavation should be undisturbed soil or compacted fill — never loose, never mud.

Width and the toe. A retaining wall footing is typically wider than a garden wall footing, and it's often designed with more width on the front (the toe) than the back. The toe resists the wall tipping forward under the soil load. A footing that's centered under the wall like a garden wall footing is missing half its job.

Gravel under the footing. The footing should sit on a bed of compacted gravel, not directly on clay. The gravel does two things: it drains water away from under the footing so the

clay doesn't turn to mush, and it gives the footing a stable, uniform base. Pouring concrete directly on Texas clay is pouring it on a material that will swell, shrink, and move underneath it.

Reinforcement. Steel in the footing, tied as a cage, so the footing acts as one rigid piece. A retaining wall footing that cracks into segments lets each segment settle and tilt on its own — and a tilted footing under a loaded wall is a wall going over.

Batter. A proper retaining wall is often built with a slight backward lean into the hill — the face tilts back a degree or two from vertical. It's called batter, and it means the wall's own weight works with it instead of against it. A wall built dead plumb, or worse, leaning slightly forward, is starting the fight at a disadvantage.

Get the footing wrong and the best drainage in the world won't save the wall. Get the drainage wrong and the best footing just delays the failure. They work together or they fail together.

Chapter 6: Reading the Failure — What Your Wall Is Telling You

Retaining walls fail in patterns, and the pattern tells you the cause — same as freestanding walls, but the vocabulary is a little different. Reading those patterns is the core skill in brick retaining wall repair: the wall tells you what beat it, if you know the language.

The forward lean — the whole wall tipping toward the low side. The classic retaining wall failure. The hill is winning. Causes, in order of likelihood: no drainage (water pressure doing the pushing), footing too shallow or too small (the base rotating under the load), or surcharge added after construction (the load grew). A slow, steady forward lean over years is usually drainage plus time. A lean that showed up fast after a wet season is water, right now.

The belly — the middle of the wall bowing out between the ends. Pressure concentrated mid-span. The ends are held by corners, returns, or stiffer sections, so the middle takes the load and bellies. This is almost always water pressure behind the middle of the run, sometimes helped by a low spot in the

grade above that collects water. If the belly is severe — the wall's face is visibly curved — the wall is past saving. Bellied masonry doesn't un-belly.

Stair-step cracking through the mortar joints. The wall is moving differentially — one part settling or rotating relative to another. On a retaining wall, stair-step cracks running diagonally usually mean the footing is settling unevenly or a section of the wall is rotating forward. Note where the cracks are widest: cracks wider at the top mean the top is moving (rotation); cracks wider at the bottom mean the base is giving.

Washout at the base — soil missing from under or in front of the footing. Water is flowing where it shouldn't, undermining the footing. Look for the source: a downspout, a grade sloping toward the wall, a broken irrigation line. Washout is the one failure mode where finding the water source and fixing it can genuinely arrest the problem — if the wall hasn't moved yet.

Efflorescence and damp faces — white staining, dark wet patches on the wall face that never quite dry. Water is moving through the wall. On a retaining wall, that means water is sitting behind it with nowhere to go. The staining is

cosmetic. The trapped water behind it is structural. A wall face that's always damp is a wall telling you its drainage doesn't exist.

The speed test, same as always: stable for years means a slow, chronic problem you can plan around. Moving fast means active water or active soil movement, and it wants attention now.

Chapter 7: What a Brick Retaining Wall

Rebuild Costs in 2026

Here's the money, with the ranges the national cost data supports and the Texas reality inside them. This is what brick retaining wall repair and rebuild work actually runs in 2026 — not guesses, ranges.

The national picture for 2026. Retaining wall work — construction and rebuilds — runs roughly **\$40 to \$300 per linear foot** across the country, with typical mid-size jobs averaging around **\$170 per linear foot**. Per square foot of wall face, the range is about **\$20 to \$53**, averaging near **\$33**. A 50-foot wall typically lands between **\$4,000 and \$10,000** all-in.

By size, so you can place your wall. A small wall — say 3 feet tall and 15 feet long — typically runs **\$2,700 to \$4,500**. A medium wall — 4 feet tall, 30 feet long — runs **\$7,200 to \$9,000**. A large wall — 6 feet tall, 50 feet long — runs **\$15,000 to \$22,500**. Those are 2026 contractor ranges for properly built walls with drainage, and brick facing runs toward the upper half because brick is slower to lay than block and the

material costs more.

What moves the number. Height dominates — remember the squared pressure rule from Chapter 2, which is also a squared cost rule. A 6-foot wall isn't 50 percent more than a 4-foot wall; it's dramatically more, because the footing gets bigger, the drainage gets more serious, and the engineering gets real. Length matters linearly. Access matters — a wall in a tight backyard that needs everything wheelbarrowed in costs more than the same wall with machine access. Demolition and disposal of the old wall is real money. And soil conditions: on our Texas clay, contractors price in deeper excavation, more gravel, and more careful base work — typically adding 15 to 30 percent over easy-soil markets. It's not gouging. It's the cost of building for the ground you have.

Brick specifically. A brick-faced retaining wall costs more than a plain block or concrete wall of the same size — the brick is material cost plus the mason's time, and a good brick face is slow work. What you're buying is the look: a brick retaining wall that matches the house is worth more to the property than a gray block wall doing the same job. Whether that premium is worth it is your call. Just know it's real.

The repair-versus-rebuild line. Small, early problems —

repointing weathered joints on a wall that's still straight and draining, clearing clogged weep holes, extending a downspout — run in the hundreds to low thousands. Angi's 2026 data puts the average brick wall repair around **\$1,659**, and that covers the small end of retaining wall work too. But once the wall has leaned, bellied, or cracked structurally, you're past repair. A wall that's moved is a wall that gets rebuilt. Spending repair money on a moved wall is spending it twice.

Chapter 8: When Repair Works and When It's Wasted Money

Not every failing retaining wall needs to come down. Here's the honest sorting — the first question in any brick retaining wall repair evaluation is whether the wall is straight or has moved, because that answer decides everything downstream.

Repair works when: the wall is still straight and plumb, the problem is identified and fixable without disturbing the structure, and the wall was built right in the first place. Real examples: weep holes clogged with soil and mulch — clean them out and the wall drains again. A downspout dumping behind the wall — extend it to daylight and the pressure drops. Mortar joints weathered on the face — repoint them. Grade sloping toward the wall — regrade. Surface water running over the top and eroding the backfill — a swale or a gutter fixes it. These are hundreds-of-dollars fixes on a wall that's fundamentally sound, and they're worth doing promptly, because a sound wall with a drainage problem becomes an unsound wall if you wait.

Drainage retrofit — the middle ground. If the wall is

straight but was built without drainage, excavating behind it and installing the full system — gravel, fabric, perforated pipe to daylight — can give a good wall the drainage it should have had. It's a big dig and it costs real money (think thousands, not hundreds, depending on length and depth), but it's cheaper than a rebuild and it addresses the number one failure cause. This only makes sense if the wall is straight, the footing is adequate, and the brick is sound. It's prevention, not resurrection.

Repair is wasted when: the wall has leaned, bellied, or cracked through. Masonry that has moved doesn't move back. Repointing the cracks on a leaning wall is cosmetic — the wall keeps leaning and the new mortar cracks with it. I've seen homeowners spend thousands on repointing and sealing a leaning retaining wall, and every dollar of it was gone within two years. The wall needed rebuilding. The repointing just made the failure prettier for a while.

The test I give homeowners: stand back and look at the wall's line. If it's straight, repair is on the table. If it's not straight, it's a rebuild. Straight walls get fixed. Crooked walls get replaced. It's that simple.

Chapter 9: The Rebuild, Step by Step — What the Crew Should Actually Do

Here's what a proper brick retaining wall rebuild looks like, so you know what you're paying for and can tell whether the crew is doing it.

Demolition and clearing. The old wall comes down. Brick worth saving gets cleaned and stacked — good brick is reusable and it matches. Everything else gets hauled off. The area behind the wall gets excavated back far enough to work — remember, the crew needs room for the gravel zone behind the new wall, not just the wall itself.

Excavation for the footing. The trench goes to depth — below the active clay zone, 18 to 24 inches minimum for a low wall, deeper for taller. The trench bottom gets compacted, and a bed of compacted gravel goes in. This is slow work in Texas clay, especially in summer when it's like concrete and in wet season when it's like soup. The schedule should account for it.

The footing. Formed or trenched, reinforced with steel, poured as one continuous piece. Wider than the wall, with

the toe toward the front. This is the part nobody sees when it's done, which is exactly why you should see it before the wall goes up. Ask the mason to call you when the footing is formed and the steel is tied, before the pour. A good mason expects this. Take a photo. You'll never see it again, and you'll be glad you looked.

The drainage system. Before the wall goes up, the drain pipe goes in at the footing level, pitched to its outlets. Then the wall rises, and as it rises, the gravel backfill goes in behind it in lifts, with the filter fabric between gravel and soil. Weep holes get built into the bottom course as the mason lays it — they're not drilled later, they're laid in. This sequencing matters: drainage isn't an afterthought applied to a finished wall, it's built in layers as the wall goes up.

The wall itself. Brick laid to the spec — and here's where the brick-face-over-structure decision from Chapter 1 matters. On a true structural brick retaining wall, the brick is the structure: multiple wythes, filled and reinforced. On a brick-faced wall, the structure is block or concrete and the brick is a veneer tied to it. Either is legitimate. What's not legitimate is a single wythe of brick pretending to hold back a hill. Know which one you're buying.

Batter and tie-backs. The wall goes up with its slight backward batter. If the design calls for tie-backs or dead-man anchors — and on taller walls it should — they go in as the backfill rises, tied into the wall and buried in the compacted backfill behind. You can't add them later without digging everything up again.

Coping and finish grade. The wall gets its cap — real coping, overhanging slightly, bedded right. The final grade gets set so water runs away from the wall on both sides, and the outlets for the drain pipe get finished to daylight. The crew walks it with you.

That's the job. Every step earns its place. Skip one and you've built the next failure.

Chapter 10: Brick Face on Structure — The Honest Option

Let me tell you about the build I recommend most often for brick retaining walls, because it's the best combination of looks, strength, and money.

The concept: the structural wall is concrete block or poured concrete — engineered for the load, reinforced, with all the drainage details. The front face gets a brick veneer, tied to the structure, matching the house. From the street, it's a brick wall. Structurally, it's a modern retaining wall.

Why it's often smarter than solid brick. A solid brick retaining wall tall enough to need real structure gets very thick — multiple wythes, grouted cores, a lot of mason time. Block goes up faster, takes reinforcement naturally (rebar in the cores, grouted solid), and an engineer can spec it cleanly. The brick veneer gives you the look without asking the brick to do structural work it was never great at. It's also easier to get right: the drainage, the waterproofing on the back of the structure, the tie-backs — all standard details on a block wall, all awkward on solid brick.

The honest trade-offs. It costs more than a plain block wall — the brick veneer is real money. It needs a mason who knows veneer ties and drainage planes, not just a block layer. And the veneer has to be detailed right — weep holes at the base of the veneer, flashing, ties — or you get a pretty face with water trapped behind it, which is its own failure mode.

When solid brick is the right call. Low walls — under about 3 feet — where the loads are modest and a good doublewythe brick wall with proper drainage handles it fine. Historic districts or matching existing solid-brick walls where the veneer would look wrong. And situations where the wall is short enough that the simplicity of one material outweighs the structural advantages of block.

Neither choice is "cheap" or "premium" in the abstract. The right choice is the one sized to the load, detailed for drainage, and built by somebody who understands which job each material is doing.

Chapter 11: Tie-Backs, Dead Men, and Holding the Hill

For taller walls — and for any wall where the soil load is serious — the wall needs help holding the hill. That help comes from anchors.

Dead-man anchors. The old, proven method: a heavy mass — a concrete block, a log, a poured concrete dead-man — buried in the compacted backfill well behind the wall, connected to the wall face with a rod, cable, or strap. The wall tries to tip forward; the dead-man, buried in undisturbed soil, holds it back. They've been holding up retaining walls for a century. On a rebuild, they go in as the backfill rises — excavate the anchor trench, set the dead-man, connect it, bury it, compact over it.

Helical tiebacks. The modern version: a steel shaft with helical plates, screwed into the soil behind the wall with equipment, then tensioned against the wall face. Foundation repair companies use them to stabilize existing walls, and they're designed into new walls too. They go deeper and hold more than a simple dead-man, and they can be proof-tested

— the installer can verify each one is holding its rated load. On a tall wall or a wall with serious surcharge, they're the professional answer.

Geogrid. For segmental and some masonry walls, layers of geogrid — a strong synthetic mesh — get laid into the backfill in horizontal layers, extending back into the hill. The grid locks the soil into a reinforced mass that acts together with the wall. It's standard in modern segmental retaining wall construction and it works — but it's a designed system, not something to improvise.

What I'd tell you: on a wall under 3 feet with good drainage, anchors are usually unnecessary — the wall's weight and footing handle it. On a wall 3 to 4 feet, dead-men are cheap insurance and good practice. Over 4 feet, or with surcharge behind it, anchors or geogrid should be in the design, and the design should involve somebody who engineers walls. The cost of the anchors is small next to the cost of the rebuild. The cost of skipping them is the second rebuild.

Chapter 12: Height Rules — When a Wall Needs an Engineer

There's a line in retaining wall work where "a good mason's judgment" stops being enough and engineering starts. Here's where that line is.

The 4-foot rule. In most jurisdictions, a retaining wall over 4 feet tall (measured from the bottom of the footing to the top of the wall) needs a permit and an engineered design. That's not bureaucracy for its own sake — it's because of the squared pressure rule from Chapter 2. Above 4 feet, the loads get serious enough that footing size, reinforcement, drainage capacity, and global stability all need to be calculated, not eyeballed. If your wall is over 4 feet, budget for an engineer. It's a few hundred to a couple thousand dollars, and it's the cheapest insurance on a five-figure wall.

Terraces. Two 3-foot walls terraced one above the other are not two independent 3-foot walls — the upper wall surcharges the lower one. Terraced walls need to be designed as a system, with enough distance between them (as a rule of thumb, at least twice the height of the lower wall) or with the

lower wall engineered for the combined load. The prettiest terraced yards I've seen fail are the ones where each wall was built pretty and none of them was built for the load above it.

Slopes above and below. A wall with a slope rising behind it takes more load than a wall with flat ground behind it — the wedge of soil pushing is bigger. A wall with a slope falling away in front of it has less soil holding its toe — less resistance to sliding and tipping. Both conditions push the design toward engineering, even on walls under 4 feet.

Near structures. A retaining wall holding up the ground your house sits on — or your neighbor's house — is not a landscape project. It's structural work with real consequences, and it gets engineered, permitted, and inspected. No exceptions, no matter how short it is.

The practical takeaway: if your wall is under 3 feet, flat ground both sides, no surcharge — a good mason builds it from experience and the details in this book. Anything bigger, steeper, loaded, or near a structure — get the engineer. The engineer's stamp costs less than one percent of what a failed tall wall costs to rebuild, and it keeps everybody honest.

Chapter 13: Texas Clay, Texas Rain — Our Special Problems

Texas gives retaining walls two special enemies, and they work as a team.

Expansive clay. Our black clay swells when wet and shrinks when dry, and the volume change moves everything sitting in it. Behind a retaining wall, clay backfill is the worst case: it swells against the wall when wet (extra pressure on top of the water pressure), shrinks away when dry (leaving voids that fill with water next rain — even more pressure). This is why the gravel backfill zone matters so much here: you're replacing the worst possible backfill material with the best possible one, in exactly the zone where it matters. If a contractor proposes backfilling your new retaining wall with the same clay that came out of the hole, that's a red flag the size of the wall.

Texas rain. We don't get gentle rain. We get months of nothing and then four inches in an afternoon. A drainage system that's adequate for a steady drizzle gets overwhelmed by a Texas gully-washer unless it's sized for it — the pipe

needs to be big enough, the outlets need to be clear, and the grade above the wall needs to move surface water away before it ever reaches the backfill. Every spring, I see walls that survived the winter fail in the first big April storm. The system wasn't sized for Texas.

The combination. Dry summer shrinks the clay, opens gaps behind the wall, maybe opens the mortar joints a little. First big fall rain pours into those gaps, the clay swells violently against the wall, the water has nowhere to go because there's no drainage — and the wall moves all at once. That sudden-failure-after-dry-spell pattern is the Texas retaining wall signature. The walls that survive it are the ones with gravel backfill (no clay to swell against the wall) and working drains (water leaves instead of pushing).

Watering discipline. The same consistent-moisture rule from freestanding walls applies double behind retaining walls. Soaker hoses or drip along the top of the wall, run consistently in dry months, keep the clay from the violent shrink-swell cycle. It's not a substitute for drainage — it's the companion to it. Drainage handles the water you can't control. Consistent watering handles the moisture you can.

Chapter 14: What the Bid Has to Say

You're hiring for brick retaining wall repair or a new build. Here's what the bid must contain — and what its absence means.

The wall spec: height, length, thickness, and whether it's solid brick, brick-faced block, or another system. "Retaining wall" without dimensions is not a bid.

The footing spec: depth, width, gravel base, reinforcement — with numbers. On a retaining wall, also the toe detail. If the footing spec is missing or vague, the bidder is planning a garden-wall footing under a retaining-wall load.

The drainage spec: gravel backfill (width of the zone — 12 inches minimum), filter fabric (yes or no), perforated pipe (size, and where it outlets — "to daylight" with the outlet location named), weep holes (spacing). Every element named. A bid that says "drainage included" without saying what drainage is a bid that's planning to skip it.

Anchors or reinforcement: dead-men, tiebacks, or geogrid — what, where, how many. Or a written statement that the

design doesn't require them and why (wall height, no surcharge). Either way, it's addressed, not ignored.

Brick and finish: what brick, how matched (for rebuilds), coping spec, and what happens to the old brick. Demolition and disposal in the scope.

Engineering: if the wall is over 4 feet, who's engineering it and is that in the bid or separate. If the bidder says engineering isn't needed on a 5-foot wall, that's your sign.

Water management above the wall: grading, downspout extensions, swales — whatever keeps surface water from pouring into the backfill. Named in the scope.

The usual: schedule, price, payment terms (deposit normal, balance on completion, never full upfront), warranty in writing, insurance.

Get three bids. Interview the middle. Ask for a retaining wall you can drive by — one that's been holding for five-plus years. And the question that sorts the pros from the pretenders: "Walk me through what happens to the water behind this wall in a four-inch rain." The mason who answers with gravel, pipe, outlets, and weeps is your mason. The one who says "it'll drain through" is planning your next rebuild.

If you're in the Fort Worth–Dallas area and want a straight bid on [brick and masonry repair](<https://championbrickrepair.com>) — retaining walls included — that's our work. And my [free brick repair books](<https://metro-foundation-repair.web.app/free-books/>) cover the rest of what your property is trying to tell you.

Chapter 15: Keeping It Standing —

Maintenance

A well-built retaining wall is low-maintenance, not no-maintenance. Here's the short list, once or twice a year.

Keep the weep holes open. Walk the wall and look at every weep hole. Mulch, soil, and plant growth clog them — and a clogged weep hole is a missing weep hole. Clear them with a stiff wire or a blast from the hose. Five minutes, twice a year.

Keep the outlets clear. Find where your drain pipe daylights and make sure it's open — not buried under mulch, not crushed, not clogged with roots. If water isn't coming out of the outlet after a rain, the system isn't working, and you want to know that before the next big storm.

Watch the grade. Soil settles, mulch gets added, flower beds grow. Every year or two, check that the ground still slopes away from the wall on both sides and that nobody's piled soil against the face and buried the weep holes. The number one maintenance failure I see is a beautiful new mulch bed, eight inches deep, burying the bottom course and every weep hole. The wall can't drain through mulch.

Watch the top. Don't let new surcharge sneak in — the shed, the hot tub, the parking pad, the stacked firewood against the wall. Every new load behind the wall is a load the wall wasn't designed for. And keep heavy equipment off the soil above the wall; a loaded dump truck parked six feet behind a 4-foot wall is a load case nobody designed for.

Look at the line. Stand back twice a year and sight down the wall. Straight is good. Any new lean, belly, or crack gets a closer look and, if it's real, a call. Catching movement at a quarter inch is a drainage fix. Catching it at three inches is a rebuild. The wall tells you early if you're looking.

Chapter 16: The DIY Reality Check

I'll be straight: a low brick retaining wall is buildable by a skilled DIYer. A tall one is not a DIY project. Here's the line.

The DIY-able wall: under 2 feet tall, short run, flat ground, no surcharge, sandy or stable soil, and you're willing to do the drainage right — gravel, fabric, pipe to daylight, weeps. That's a real project: dig to depth, compact the base, pour or lay the footing, lay the brick, build the drainage in as you go. It'll take a homeowner several weekends. The materials are a few hundred dollars. The labor is yours.

Where DIY goes wrong: the footing gets shallow because digging in Texas clay is miserable. The drainage gets skipped because it's invisible and unglamorous. The wall goes up pretty and the hill goes down eventually. I'd estimate most DIY retaining wall failures I see are drainage failures — the visible work was fine, the invisible work was missing. The invisible work is the wall.

The hire-it-out wall: anything over 3 feet, any surcharge, any slope, Texas clay, anything near a structure, anything terraced. The excavation alone wants equipment, the footing

wants to be right, and the drainage wants to be complete. A mason who's built fifty of these does in three days what takes you six weekends, and his doesn't fail.

The middle path: DIY the demolition and the excavation — the donkey work — and hire the mason for the footing, drainage, and brick. You save real money on labor, the skilled parts get skilled hands, and everybody's happy. Just agree on the split upfront: the mason specs the excavation depth and the drainage, you dig to his spec, he verifies before he builds.

One more thing: permits. Many Texas cities require permits for retaining walls over a certain height — commonly 4 feet, sometimes lower. A DIY wall that needed a permit and didn't get one becomes a problem when you sell the house. Check before you dig.

Chapter 17: Questions Homeowners Ask Me

My wall is leaning a little. Can you just push it back? No — same answer as freestanding walls, with more force behind it. A retaining wall that's moved has failed structurally. Pushing it back doesn't fix the drainage, the footing, or the load that moved it. It comes down and gets rebuilt right. Anything else is theater.

Can the wall be saved by adding drainage? If it's still straight — yes, a drainage retrofit can save it (Chapter 8). If it's moved — no. Drainage stops the cause from getting worse; it doesn't reverse movement. Straight walls get drainage. Crooked walls get rebuilt with drainage.

How long should a properly built brick retaining wall last? Decades — fifty years and more isn't unusual for a well-built wall with working drainage. The brick and mortar are durable; it's the water that kills walls, and a drained wall doesn't have that problem. The walls I rebuild at twenty years old were built wrong. The walls I admire at sixty were built right.

Will plants behind the wall hurt it? Small plantings are fine

and actually help — roots hold soil and drink water. Big trees and large shrubs are the problem: roots under the footing, water demand shrinking the clay. Keep large plantings back from the wall — fifteen to twenty feet for big trees — and don't plant anything with aggressive roots (bamboo, I'm looking at you) anywhere near it.

What about a concrete or block wall instead of brick?

Honest answer: block and poured concrete are excellent retaining wall materials, often cheaper and faster than brick, and they take reinforcement naturally. What brick buys you is the look — and on a brick house, in a brick neighborhood, the look is worth real money at resale. The brick-face-on-structure build (Chapter 10) splits the difference. Don't let anybody tell you brick is "stronger" — strength comes from the engineering, not the material. And don't let anybody tell you brick is "weaker" either — a properly built brick retaining wall holds its hill as well as anything.

Does insurance cover a failed retaining wall? Almost never. Wear, settling, and water damage over time are maintenance — the homeowner's responsibility. Sudden damage from a covered event (a vehicle hits it, a tornado) can be a claim. And here's the Texas note: if your wall fails and

damages a neighbor's property, that's your liability. Keep your wall sound — it's cheaper than the alternative in every direction.

Should I be worried about my wall after this year's drought? Yes, a little — and smart, not scared. Drought shrinks the clay, opens gaps, stresses the wall. Walk it after the drought breaks and the rains return: look for new lean, new cracks, weep holes that aren't weeping. The drought-then-deluge cycle is when Texas retaining walls fail. A wall that was marginal in June can be a rebuild by October. Look at it. That's free.

A Final Word Before You Call

A retaining wall is a promise: this hill stays here. Most of the broken promises I've torn down were never really made — the wall was built like a garden wall, with no drainage, a shallow footing, and no respect for the load. The hill collected on the debt within a few years.

Build it right and it's a fifty-year promise. Drainage behind it — gravel, fabric, pipe to daylight, weeps. Footing below the clay's mood swings, wide enough, reinforced. Anchors when the height calls for them. An engineer when the size calls for

one. None of it's glamorous. All of it is the wall.

Your hill isn't going anywhere. Make sure your wall isn't either.

About the Author

Travis Nech has spent 50 years in Texas brick, masonry, and foundation work. He owns [Champion Brick Repair](<https://championbrickrepair.com>) — (817) 900-6324 — [Metro Foundation Repair](<https://metrofoundationrepair.com>) — (817) 670-4474 — and the [LintelLOCK](<https://lintlerepair.com>) lintel system — (469) 730-0650. All his books are free at [Travis Nech's Free Book Library](<https://metro-foundation-repair.web.app/free-books/>).