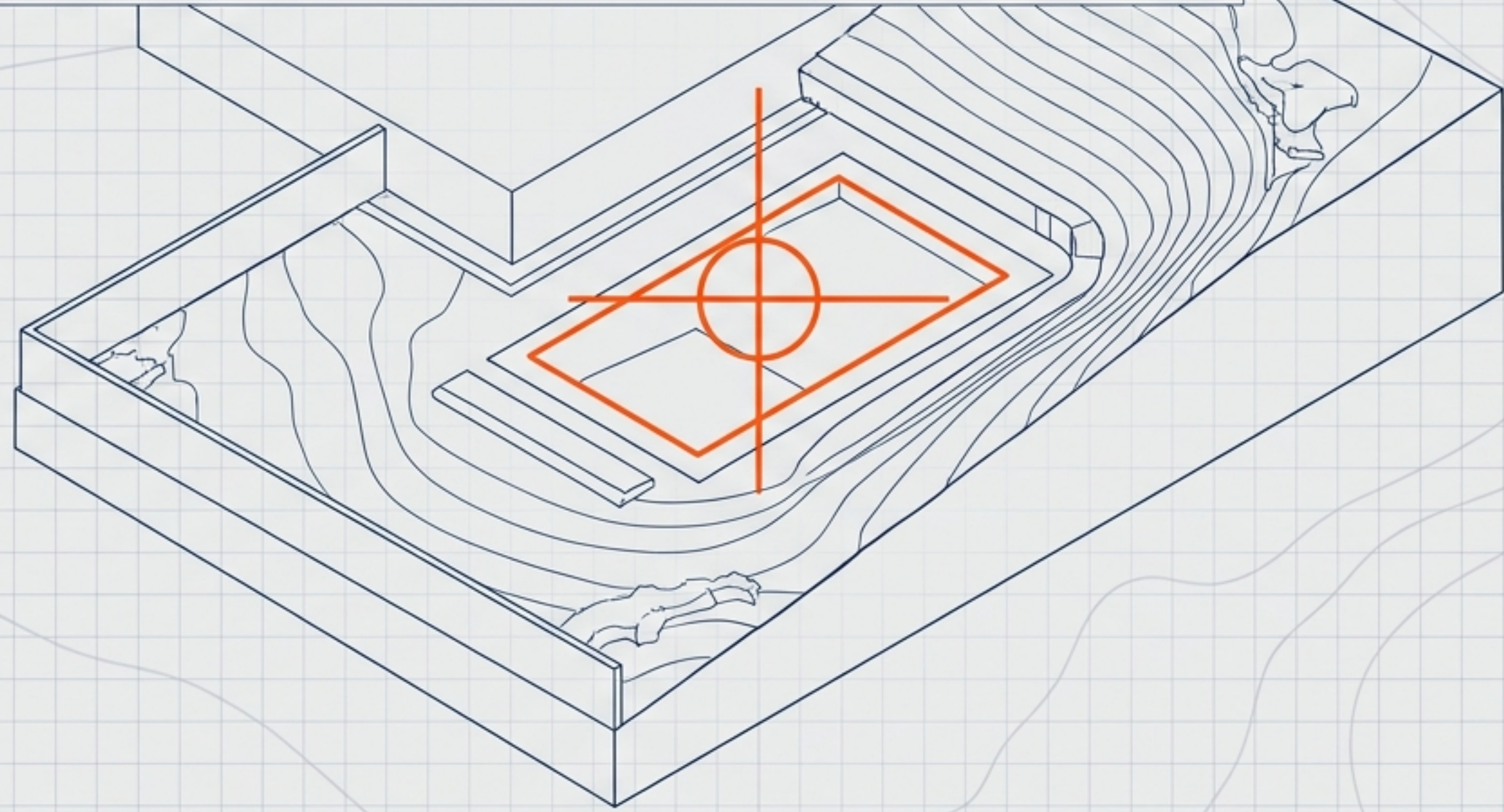


The 2026 Portland Pool Dossier

Engineering a Six-Figure Civil Project in the Pacific Northwest



Strategic guidelines, risk mitigation, and market realities for the Portland homeowner.

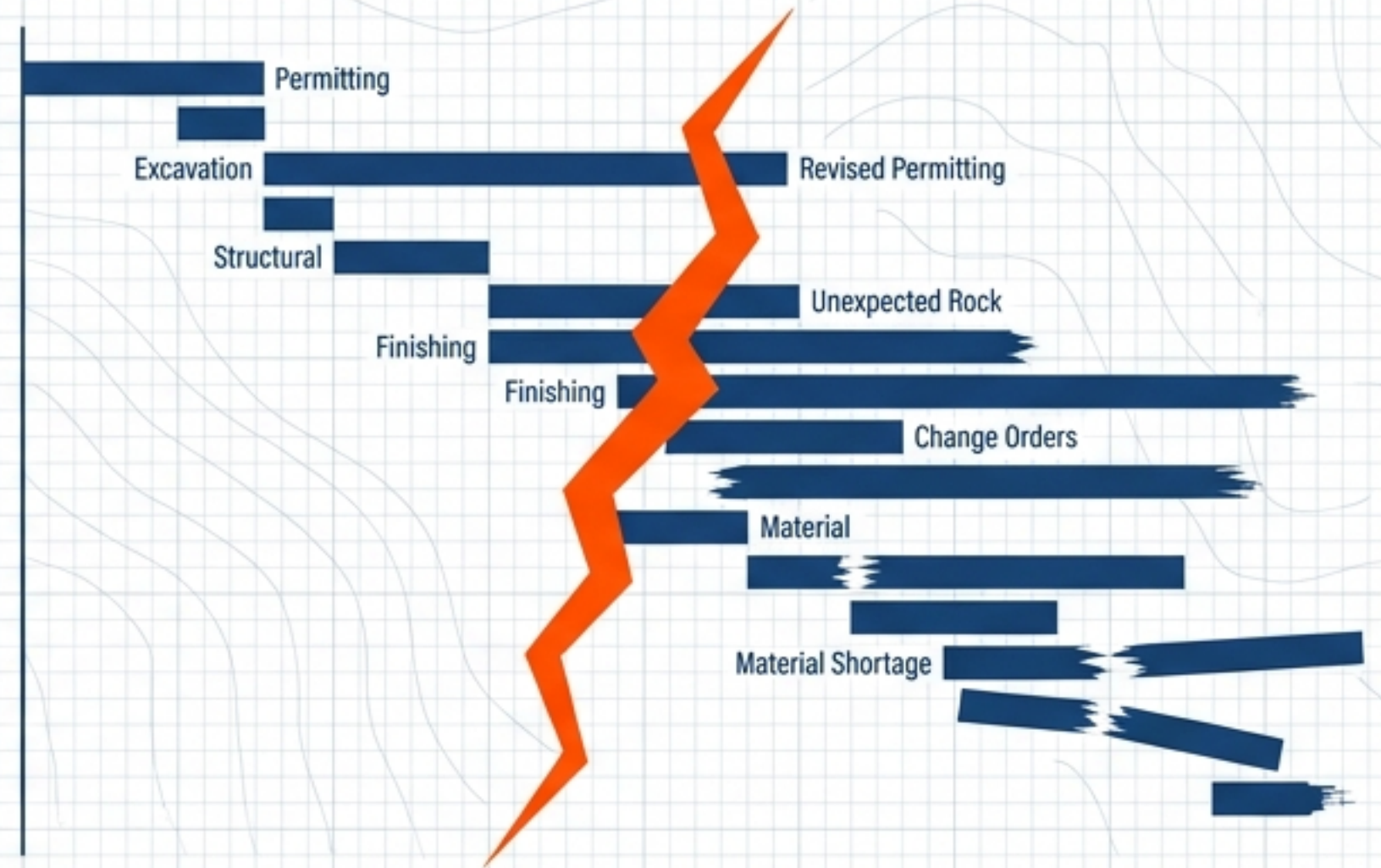
THE PORTLAND POOL PENALTY

+ \$25,000

AVERAGE BUDGET OVERRUN

+ 3 MONTHS

AVERAGE SCHEDULE DELAY



Most blowouts are unforced errors stemming from three initial assumptions: that the ground is stable, the quote is complete, and any finish will work.

THE CORE META-MISTAKE

THE ILLUSION



Buying a Luxury Product.

- Treating a pool like an off-the-shelf purchase.
- Relying on a single sales front who subcontracts every phase.

THE REALITY



⚠ Managing a Civil Engineering Project.

- Coordinating multi-trade construction involving excavation, structural engineering, concrete, plumbing, electrical, and gas work.

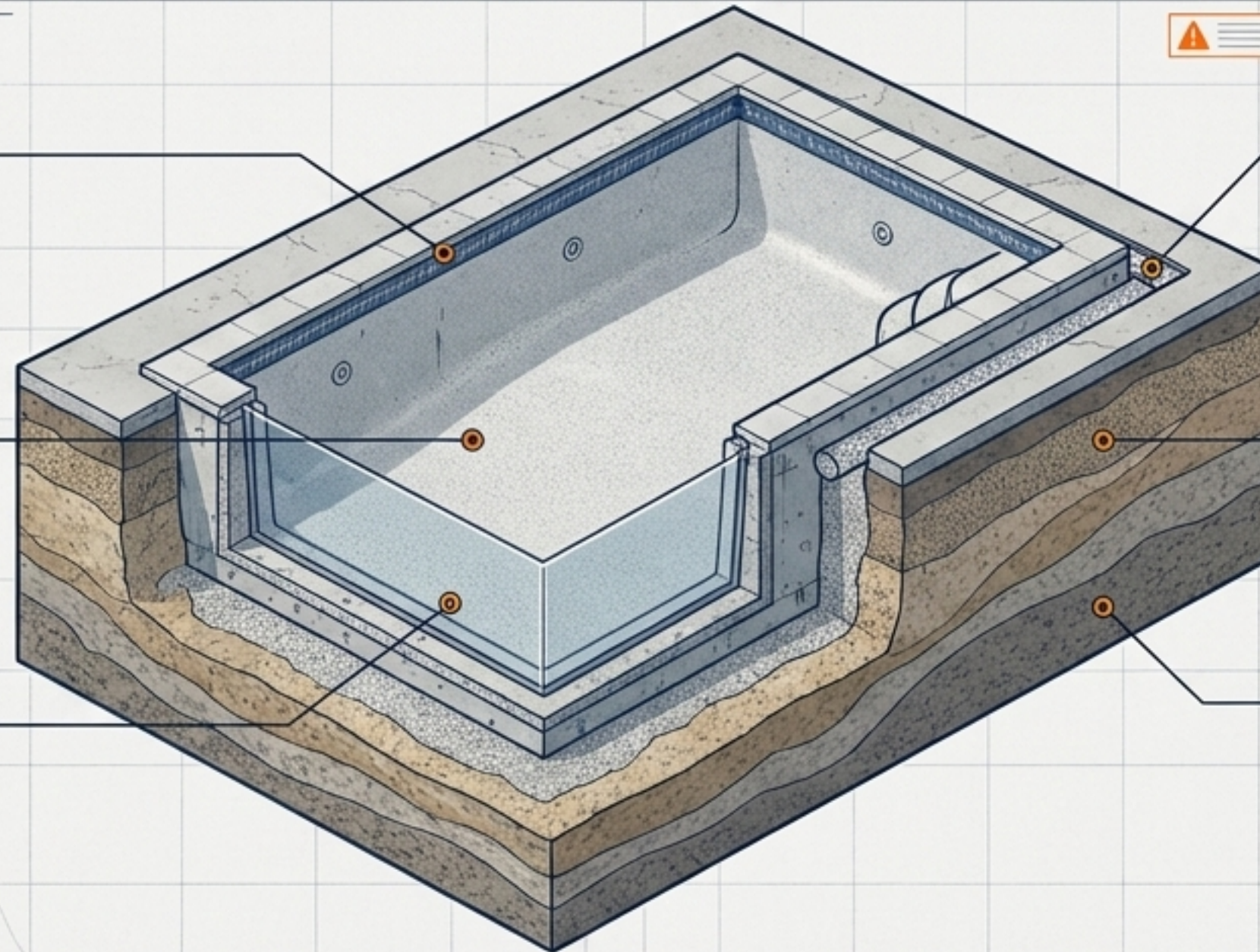
What Lies Beneath: Engineering for the Pacific Northwest

The Anatomy of a Portland Pool

Waterline: Frost-proof porcelain tile (resists freeze-thaw cracking).

Interior Finish: PebbleTec or Wet Edge aggregate (prevents spalling).

Underlayment: Schluter-KERDI premium waterproofing.






Perimeter: French drain system (manages hydrostatic pressure).

Foundation: Engineered geotech fill (replaces unstable soil).

Surrounding Earth: Portland Mud (heavy, expansive clay).

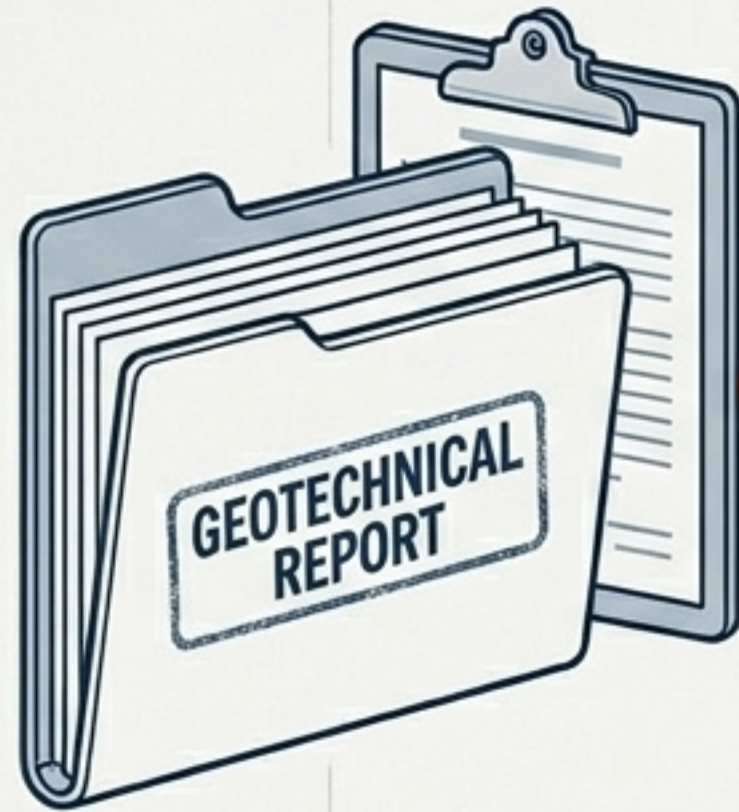
CLIMATE REALITY: WHY SUNBELT SPECS FAIL IN OREGON

CLIMATE REALITY MATRIX

CATEGORY	THE SUNBELT POOL	THE PORTLAND POOL
 Hydrology	Dry soil.	9 months of rain. ⚠ Risk: Hydrostatic pressure can literally lift an empty pool shell out of the ground.
 Soil Mechanics	Sandy/Stable.	Portland Mud (Expansive Clay). ⚠ Risk: Swells when wet, shrinks when dry, putting immense pressure on the structure.
 Winterization	Year-round operations.	Freeze-thaw cycles. ⚠ Risk: Freezing cracks underground pipes (\$5k repair) and destroys porous tile.

The Subterranean Gamble: Ignoring Portland Mud

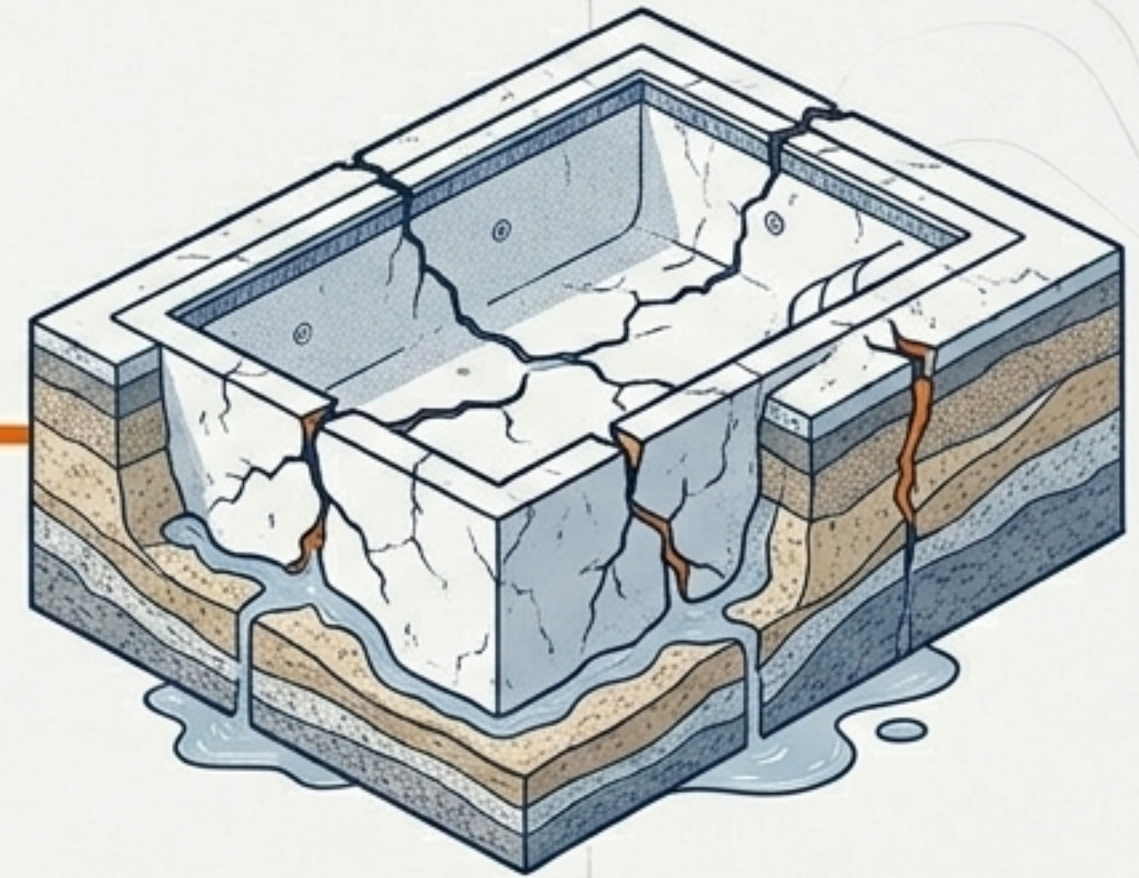
The Investment: \$2,000



A pre-bid geotechnical soil report detailing exact over-excavation and engineered fill requirements.

VS

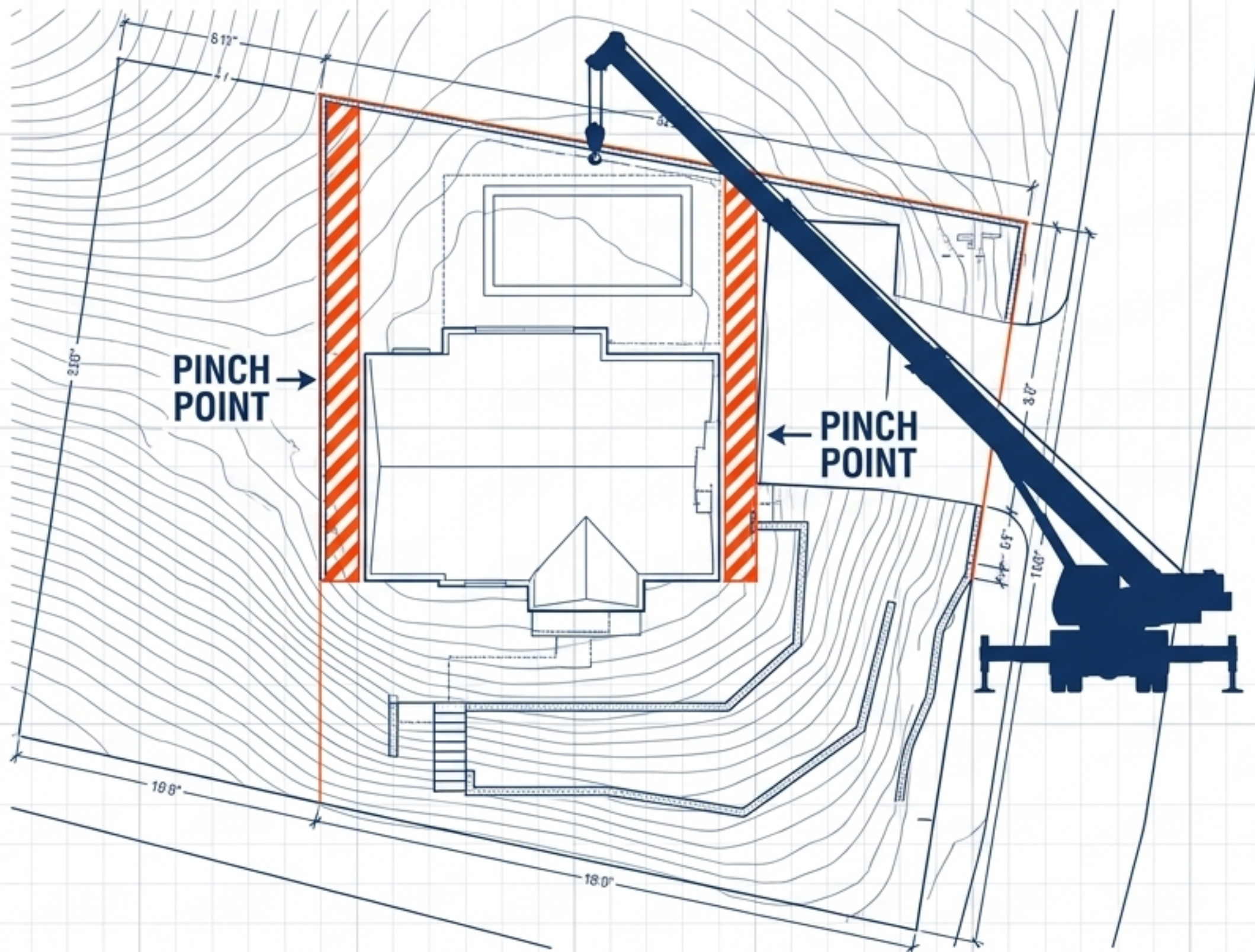
The Penalty: \$30,000+



Cracked shells and plumbing leaks caused by shifting clay soil.

The Directive: Do not speak to a single pool contractor until you hold a geotechnical soil report for your property.

LOGISTICAL HURDLES: THE COST OF TIGHT ACCESS



CONTEXT:

Homeowners fixate on design, forgetting how the excavator actually gets into a Laurelhurst backyard or a sloped West Linn lot.

THE IMPACT:

Poor access forces the use of smaller, slower equipment.

⚠ THE CRANE PENALTY:

In extreme cases, lifting equipment over the house costs \$5,000 per day.

THE BLUEPRINT FIX:

Demand a written site access plan specifying equipment, fence removal, and landscape protection costs before signing.

The Mechanical Engine: Specifying for ROI

Box 1: Variable-Speed Pump (e.g., Pentair IntelliFlo)

Why: Avoids the \$800/year utility penalty of a basic single-speed pump.

Variable-Speed Pump (Pentair IntelliFlo)

Box 2: High-Efficiency Heater (e.g., Jandy JXi)

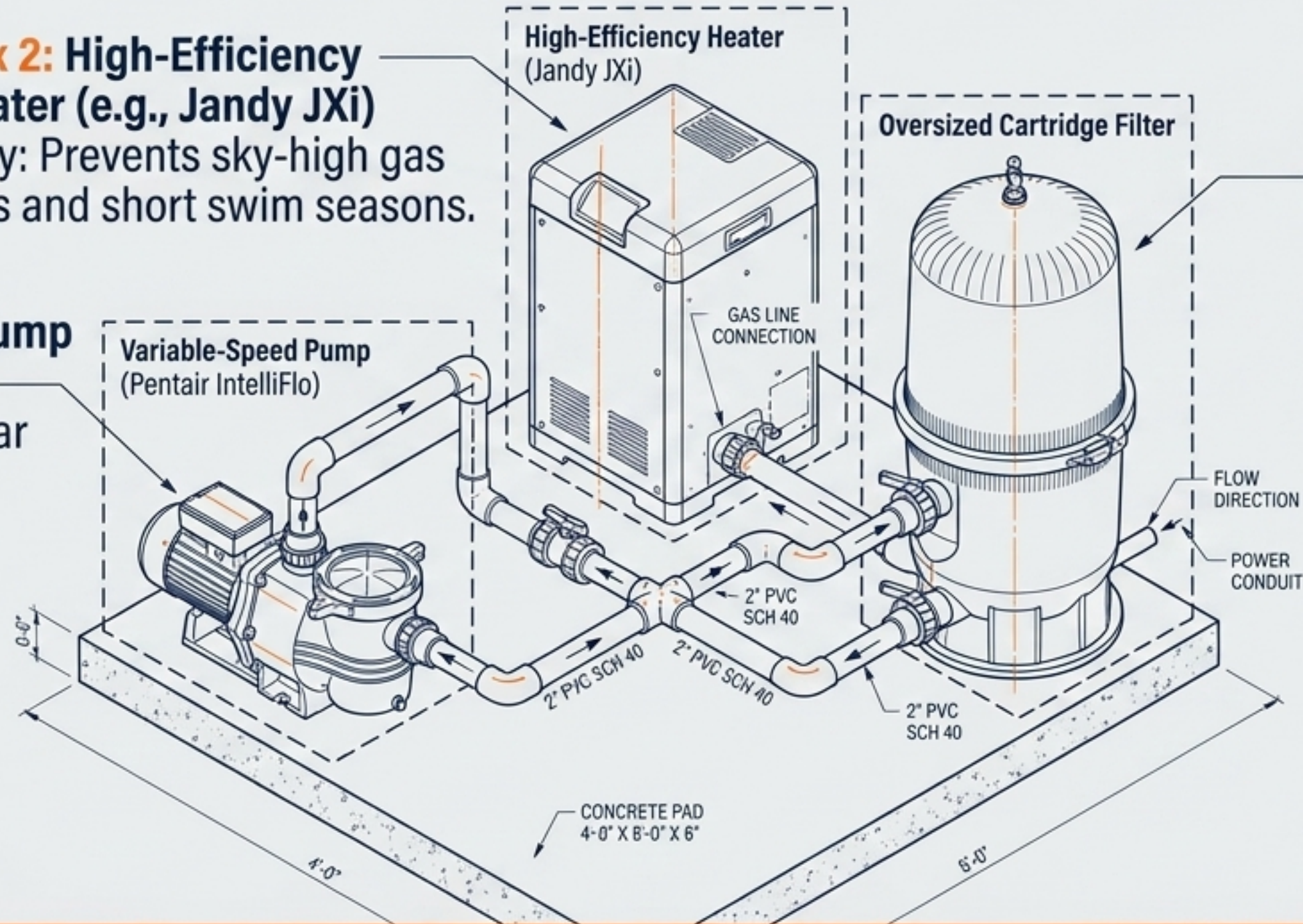
Why: Prevents sky-high gas bills and short swim seasons.

High-Efficiency Heater (Jandy JXi)

Oversized Cartridge Filter

Box 3: Oversized Cartridge Filter

Why: Requires significantly less frequent cleaning and maintenance.



The Blueprint Fix: Never let a contractor choose the cheapest package. Specify exact model numbers in the contract.

Document Deconstruction: The Vague Quote Trap

"fake" 1-page quote

Pool Construction - Basic Package
Standard Materials
Labor Included

BLANK SPACE
UNACCOUNTED
HIDDEN COSTS
VAGUE

\$45,000 TOTAL

THE RED FLAGS (MISSING ITEMS):

- Electrical trenching, gas line installation, safety fencing, temporary access roads

THE TRAP:

A vague quote intentionally omits critical components to look cheap, opening the door to \$20,000+ in change orders.

validation

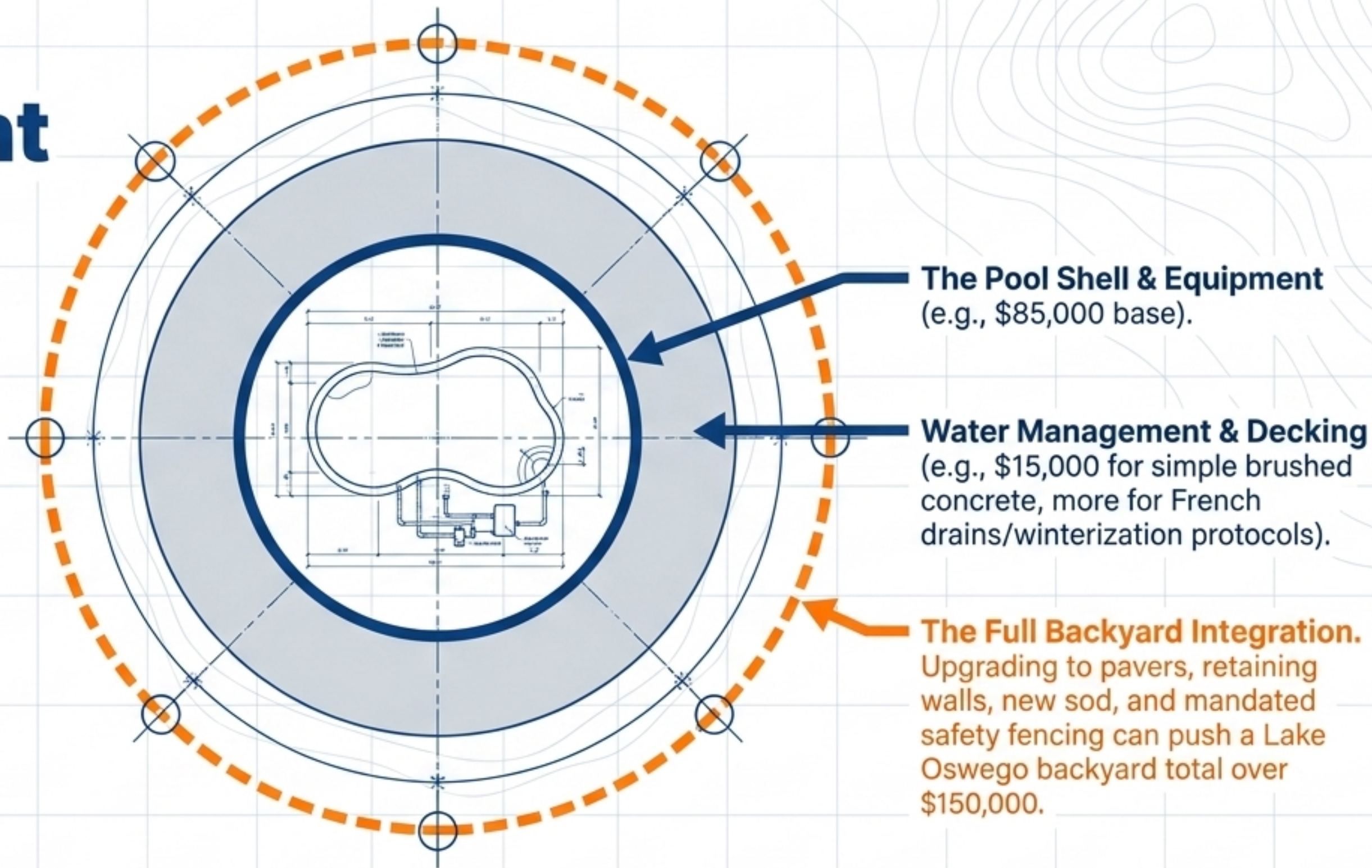
THE BLUEPRINT FIX (LINE-ITEM BID REQUIRED):

Must explicitly break out:

- Excavation
- Steel Reinforcement
- Gunite Application
- Plumbing Installation
- Electrical Systems
- Tile & Coping
- Decking Materials & Labor
- Equipment (Pump, Filter, Heater)

**Get 3 quotes, check 3 references,
visit 1 finished job.**

The Total Environment Radius

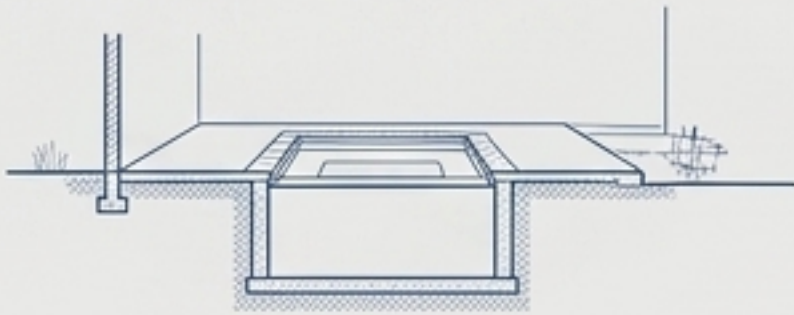


Takeaway: Stop budgeting for the water. Budget for the entire outdoor space from day one.

2026 Portland Market Baselines

The Sellwood Spool

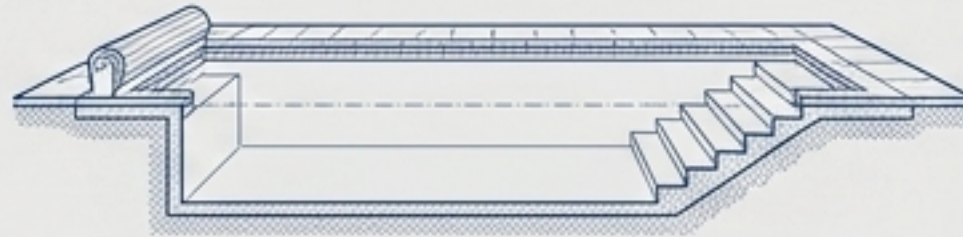
\$85,000



- 8x15 ft cocktail pool/spa.
- Tight access (mini-excavators).
- Variable-speed pump, heater, basic concrete deck.

The Laurelhurst Geometric

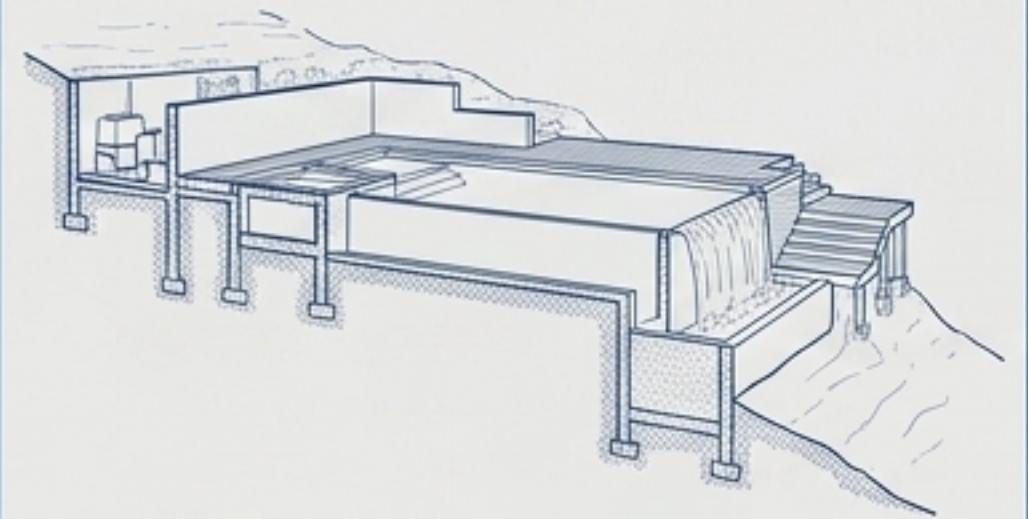
\$130,000



- 15x30 ft rectangular pool.
- Heavy clay excavation.
- Auto cover, travertine pavers, waterline tile, aggregate finish.

The West Linn Infinity

\$225,000+



- 20x40 ft on a sloped lot.
- Extensive structural engineering, large equipment set.
- Attached spa, multi-level ipe wood deck.

The Ultimate Synthesis: The GC Mindset

The Rule: You are the General Contractor until you formally hire one. Treat this six-figure investment with the rigor of a home addition.

The Pre-Dig Blueprint

- Procure \$2k Geotechnical Soil Report.
- Secure Written Site Access & Protection Plan.
- Specify PNW Materials (Porcelain, Schluter-KERDI, Aggregate).
- Demand Line-Item Quotes with Equipment Model Numbers.
- Engineer French Drains & Hydrology Defenses.
- Budget the Total Environment + 15% Contingency.