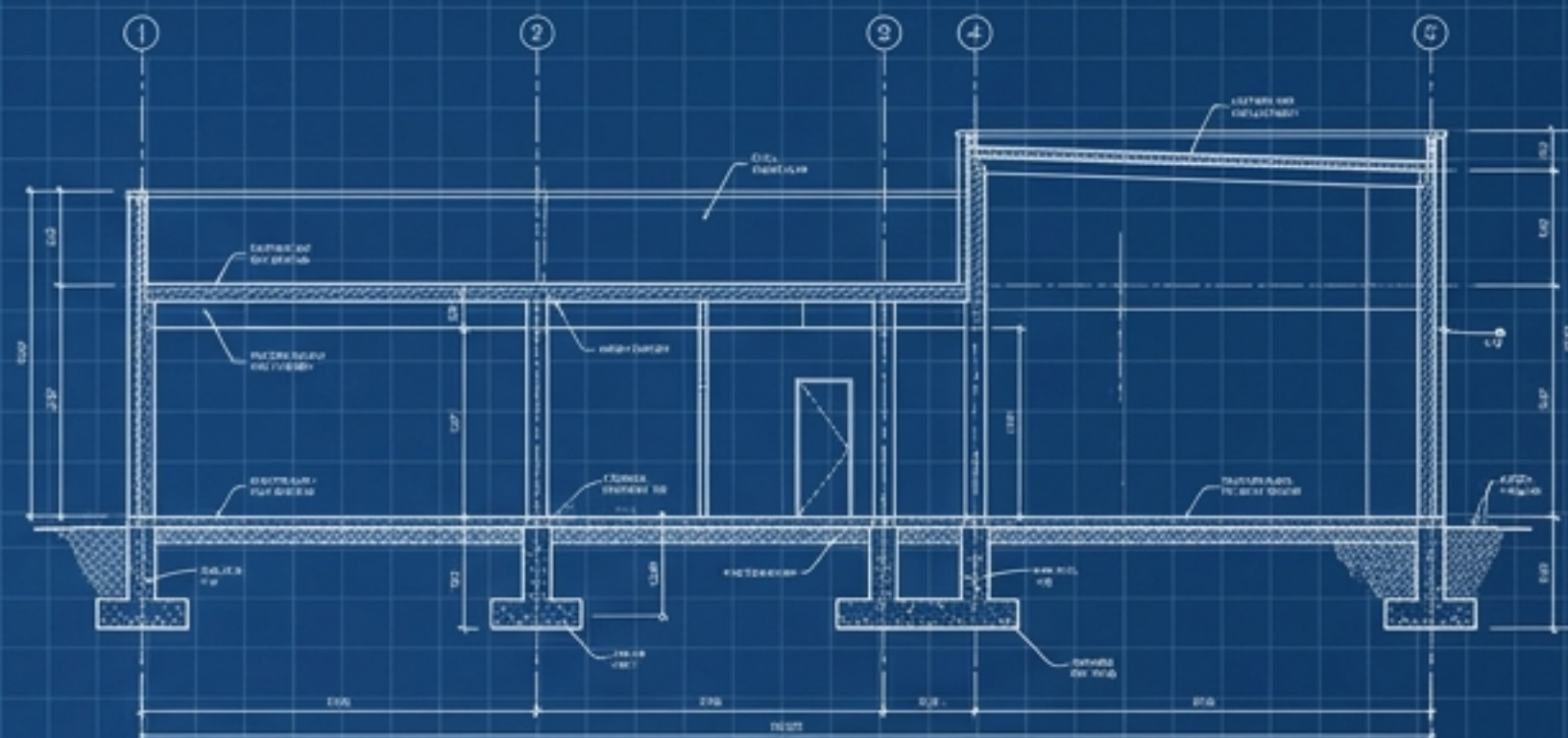


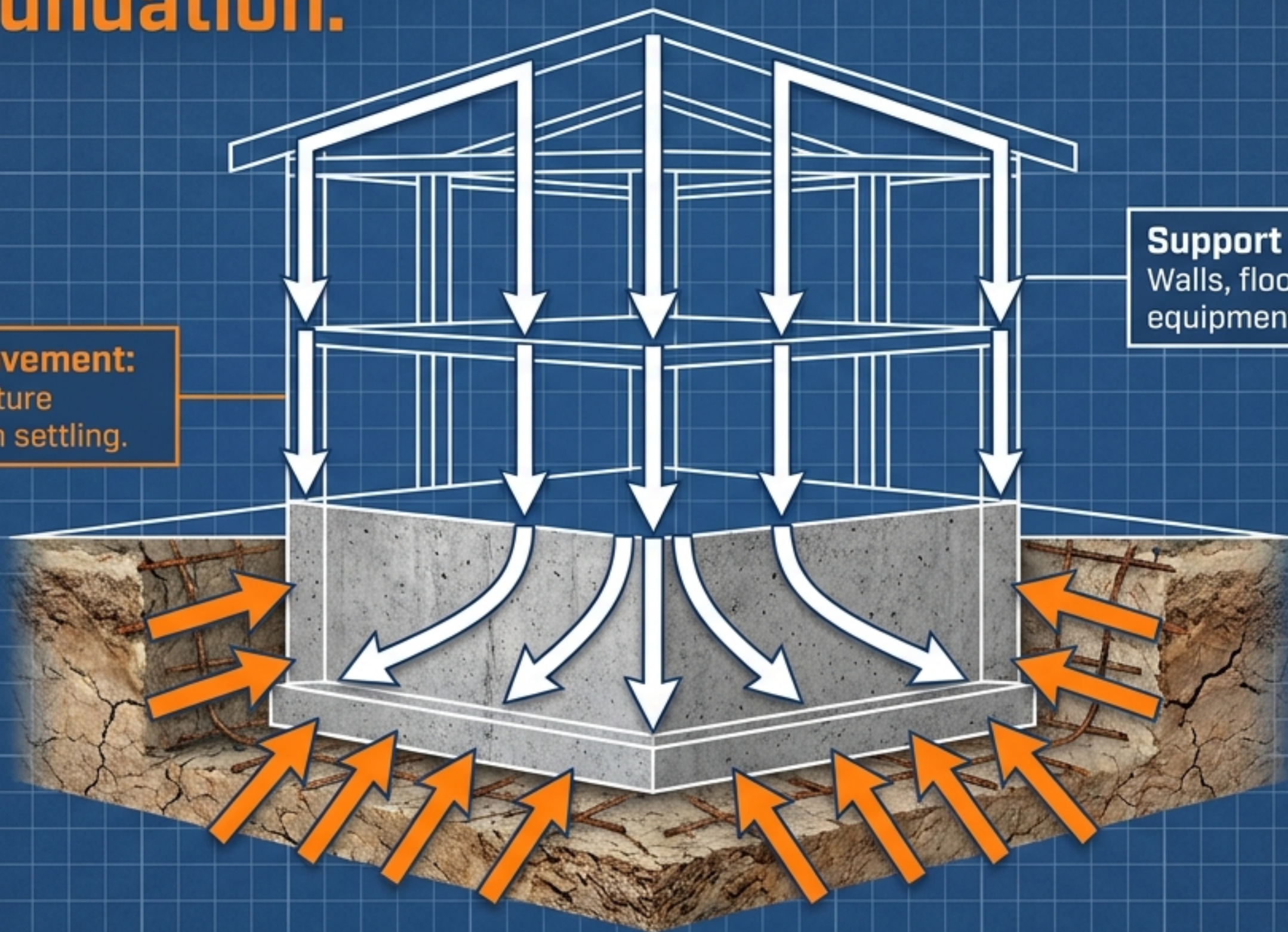
A masterclass on structural stability, expansive soils, and engineered solutions for Odessa, Midland, and beyond.



The Dual Mandate of Every Foundation.

Resist Ground Movement:
Soil expansion, moisture changes, and uneven settling.

Support the Load:
Walls, floors, roofing, equipment, and occupants.



The West Texas Threat Matrix.

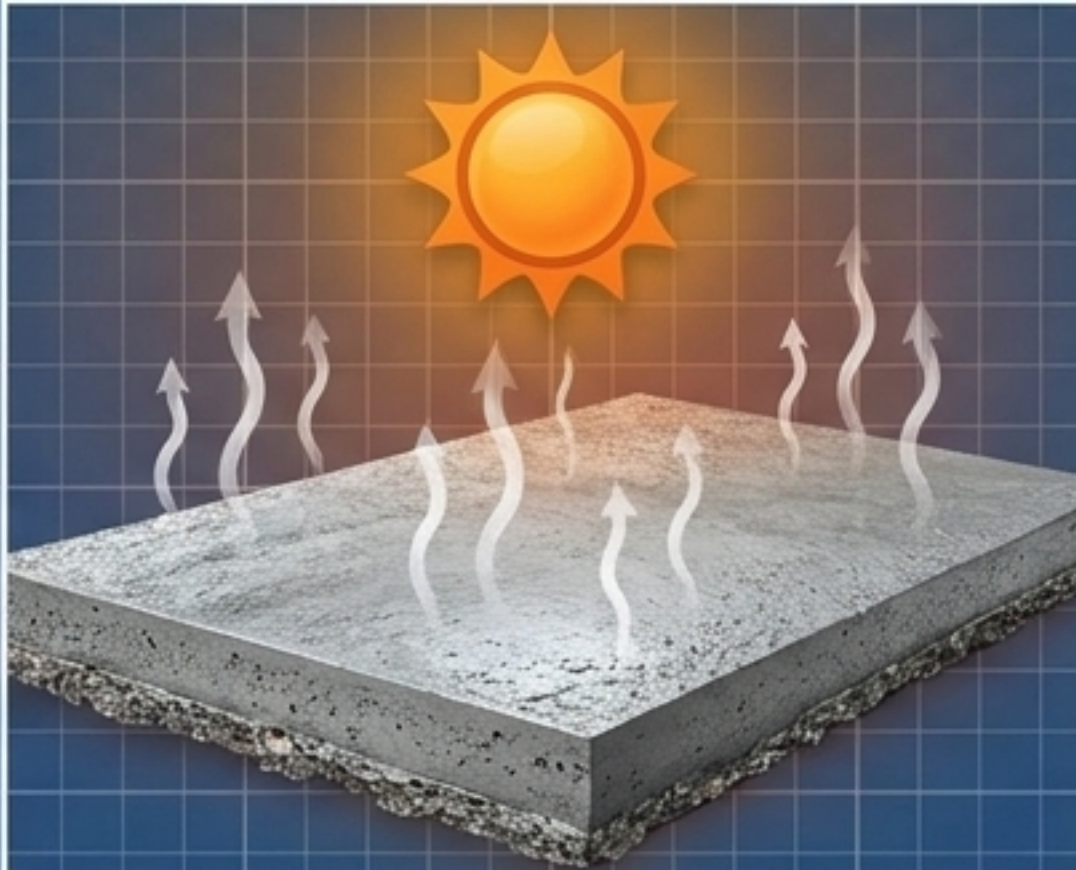
Expansive Clay Soils.



Severe shrink-and-swell cycles directly impact load-bearing elements.

High moisture intake causes clay to expand, exerting immense upward pressure, while drying causes contraction, leading to settling and structural separation.

Temperature Swings.



High summer heat accelerates moisture evaporation, risking severe weakness during the concrete curing phase.

Rapid water loss during curing compromises hydration, resulting in reduced concrete strength, increased surface cracking, and susceptibility to future damage.

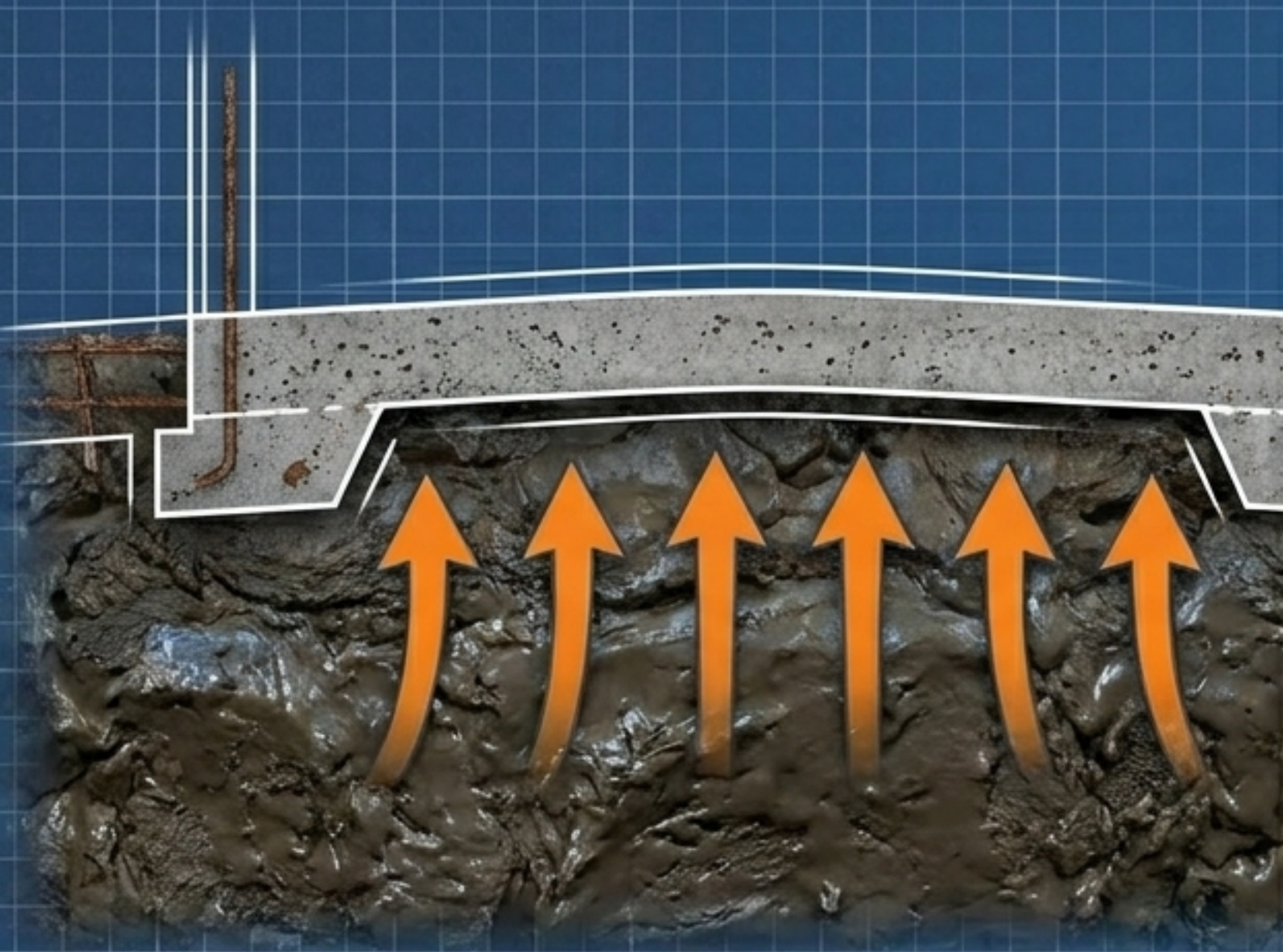
Intense Storm Events.



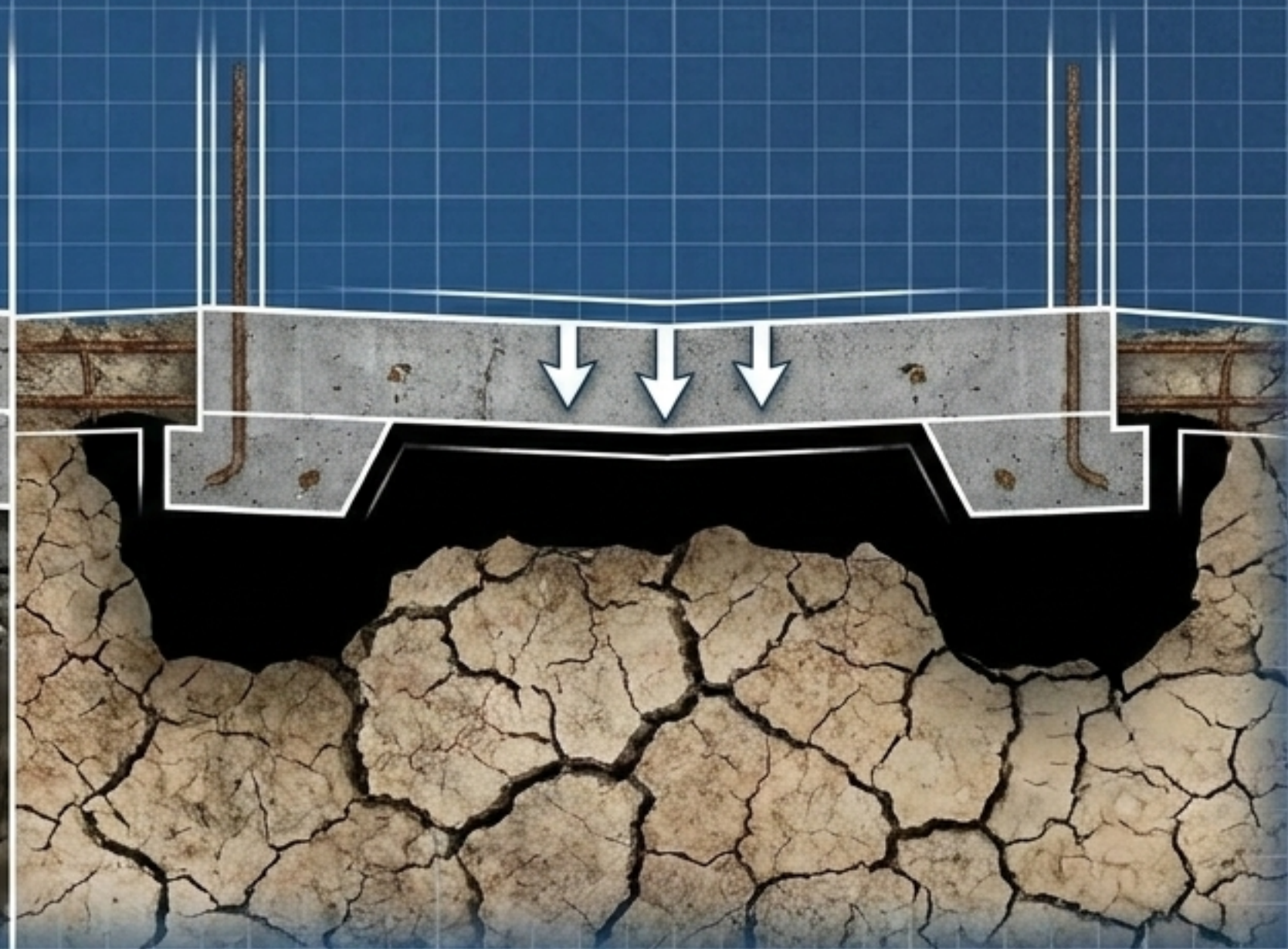
Sudden runoff over dry earth overwhelms poor drainage, undermining and eroding the subgrade.

Rapid influx of water onto dry soil causes flash flooding, washing away the foundation's supporting earth and creating voids that lead to catastrophic settlement.

The Expansive Clay Engine in Motion.



Wet Cycle: Upward Pressure.



Dry Cycle: Loss of Support & Downward Settling.

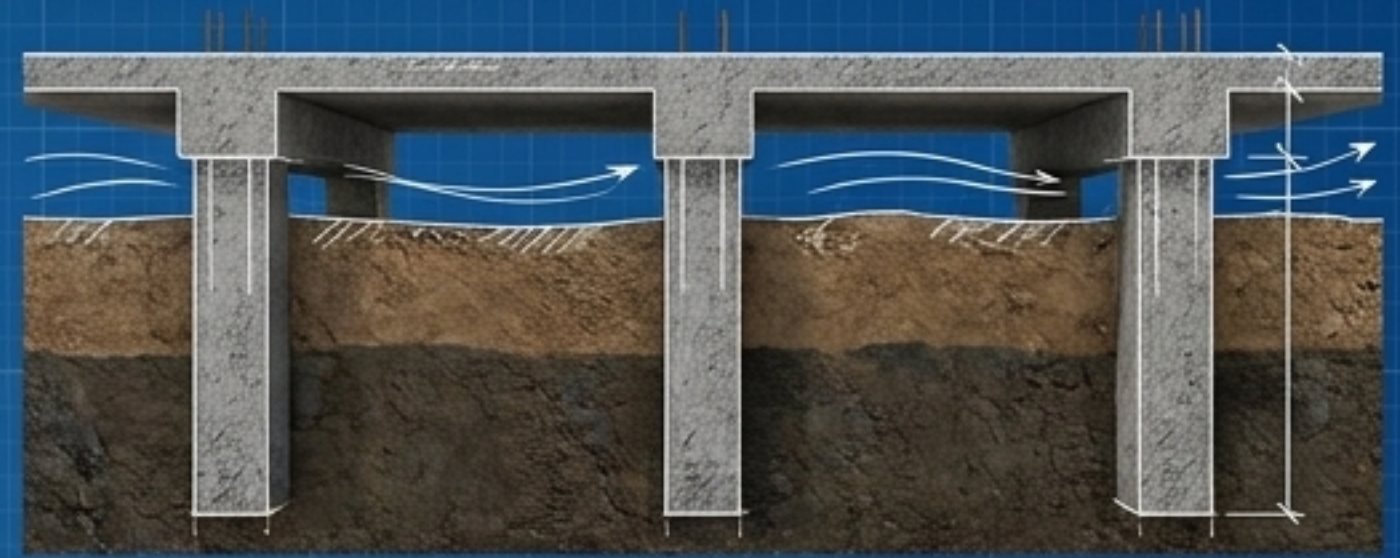
Engineered Countermeasures: Foundation Typology

Slab-on-Grade



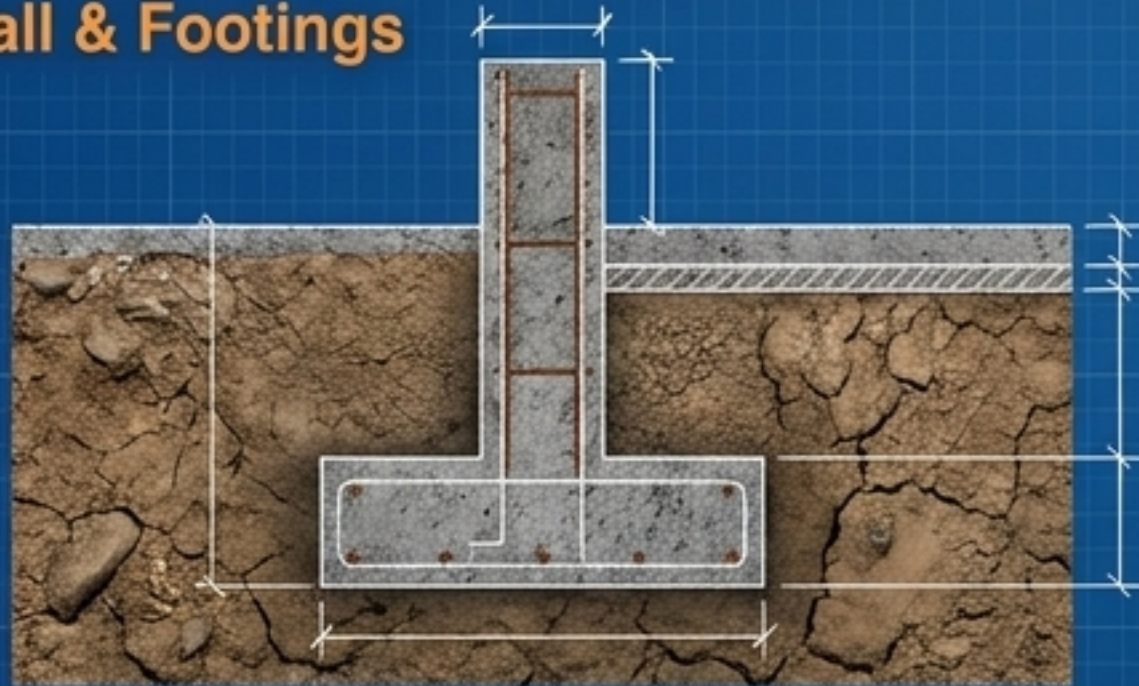
Slab-on-Grade: Cost-effective. Ideal for stable soil in residential/light commercial.

Pier & Beam



Pier & Beam: For unstable surface soils or buildings requiring elevation.

Stem Wall & Footings



Stem Wall & Footings: Distributes heavy loads. Standard for retail, offices, and oilfield facilities.

Mat (Raft) Foundation



Mat Foundation: Spreads massive downward pressure for specialized industrial applications.

Matching Scale to Structure.

 Residential	 Commercial	 Industrial
Load: Light to moderate.	Load: Moderate to heavy.	Load: Heavy equipment & machinery (oilfield service yards).
Common Type: Slab-on-grade.	Common Type: Footings & stem walls.	Common Type: Reinforced slab or Mat.
Reinforcement: Rebar or post-tension cables.	Reinforcement: Heavy rebar systems.	Reinforcement: Engineered steel reinforcement.
Design Complexity: Moderate.	Design Complexity: High.	Design Complexity: Very high.
Timeline: 1-2 weeks.	Timeline: Variable.	Timeline: Extended phase.

From Soil to Slab: The Construction Ladder.

1. Site Evaluation & Soil Testing.

Geotechnical testing for bearing capacity and clay expansion potential.

2. Excavation & Subgrade Prep.

Grading and strict compaction to prevent uneven settling.

2. Excavation & Subgrade Prep.

Grading and strict compaction to prevent uneven settling.

3. Formwork & Reinforcement.

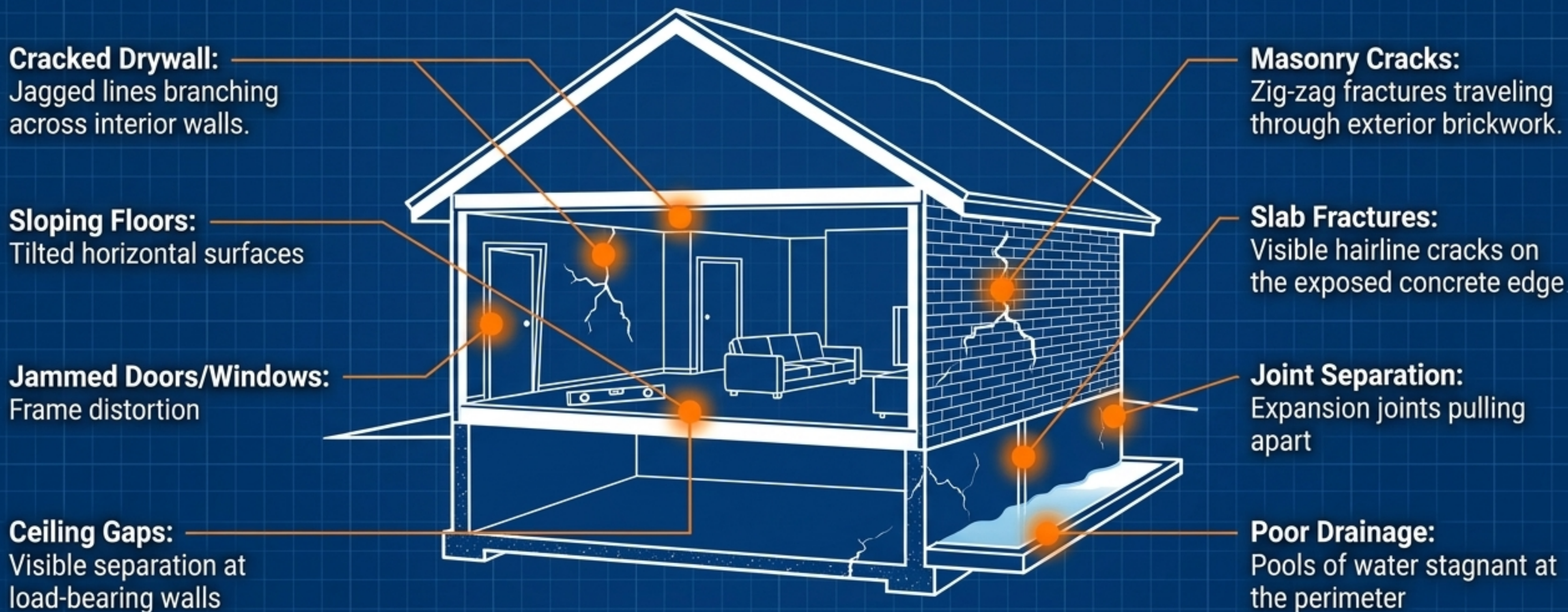
Placing engineered steel frameworks to resist cracking and bending forces.

4. Placement & Curing.

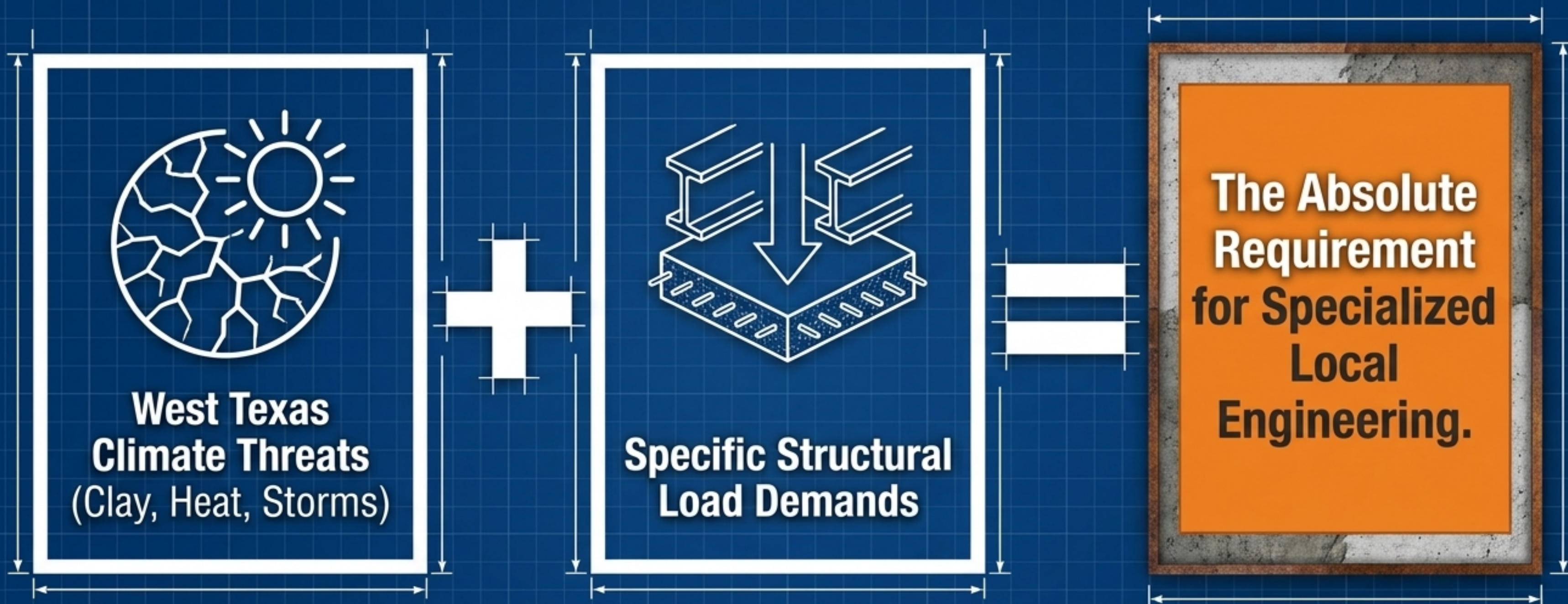
Precision pouring and strict temperature management to prevent rapid moisture loss in the West Texas heat.

Recognizing Structural Compromise

Unseen soil movement manifests as highly visible structural distress.



The Permian Equation.



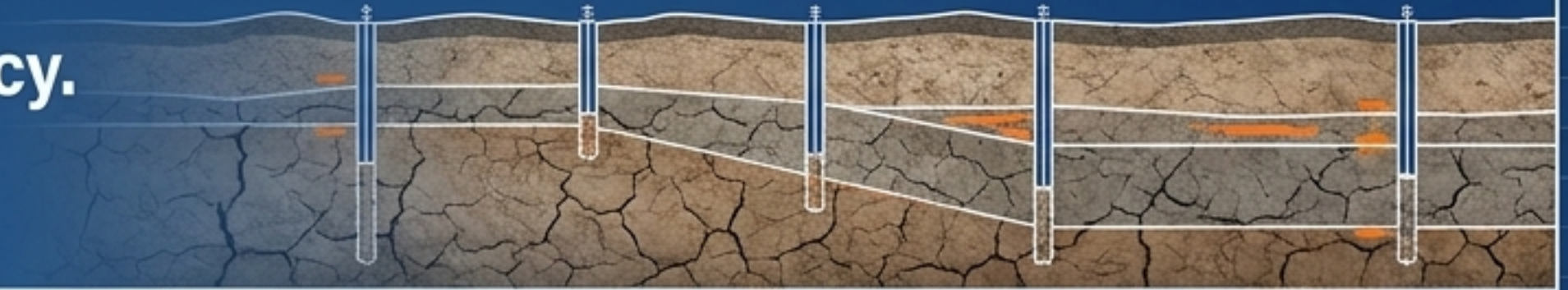
A generic mix will fail. A 50-year foundation demands site-specific subgrade preparation, perfectly calibrated reinforcement, and climate-adjusted curing protocols.

Vetting Your Concrete Partner.



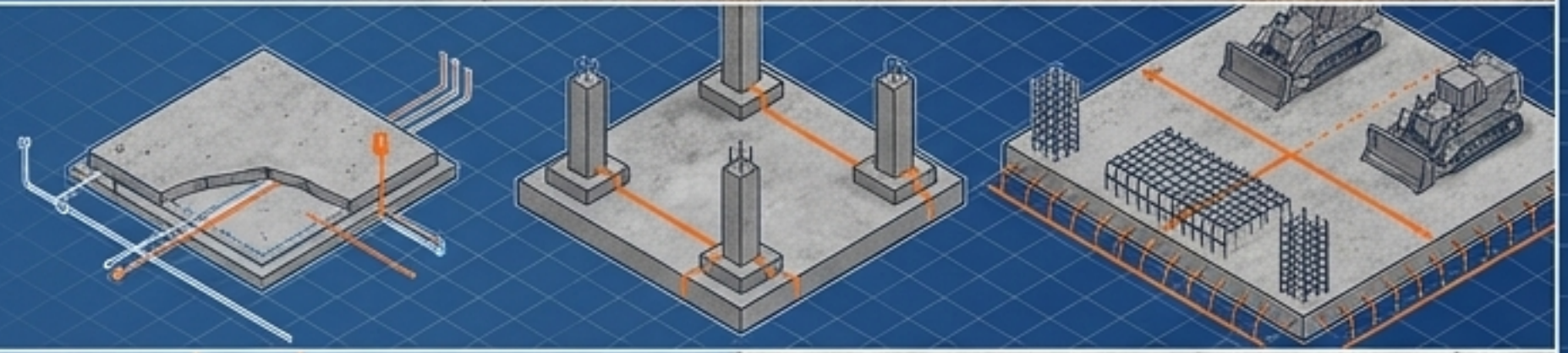
Deep Geotechnical Fluency.

Understands Midland/Odessa expansive clay profiles.



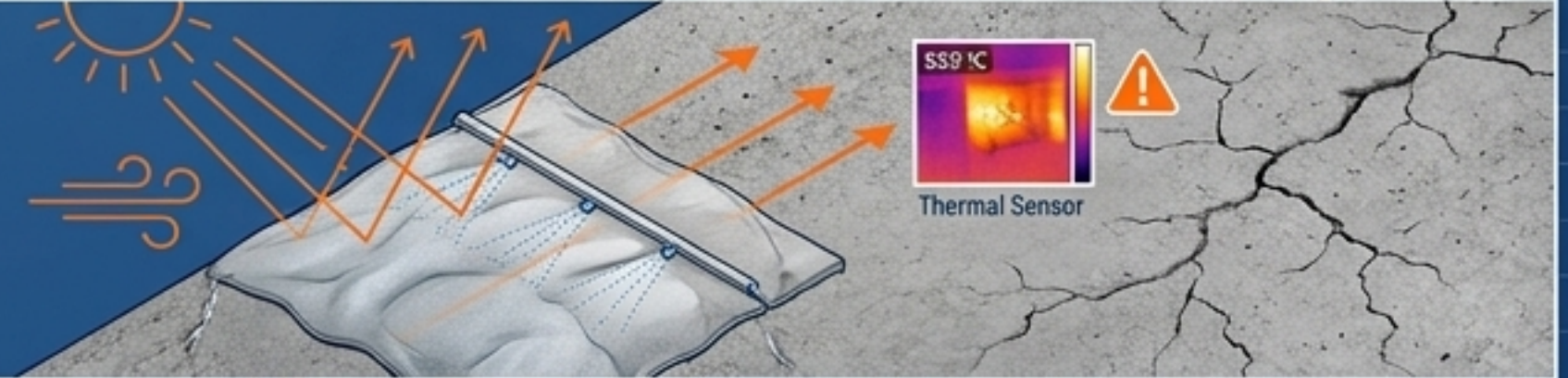
Cross-Scale Execution.

Demonstrated expertise across residential slabs, commercial footings, and industrial mats.



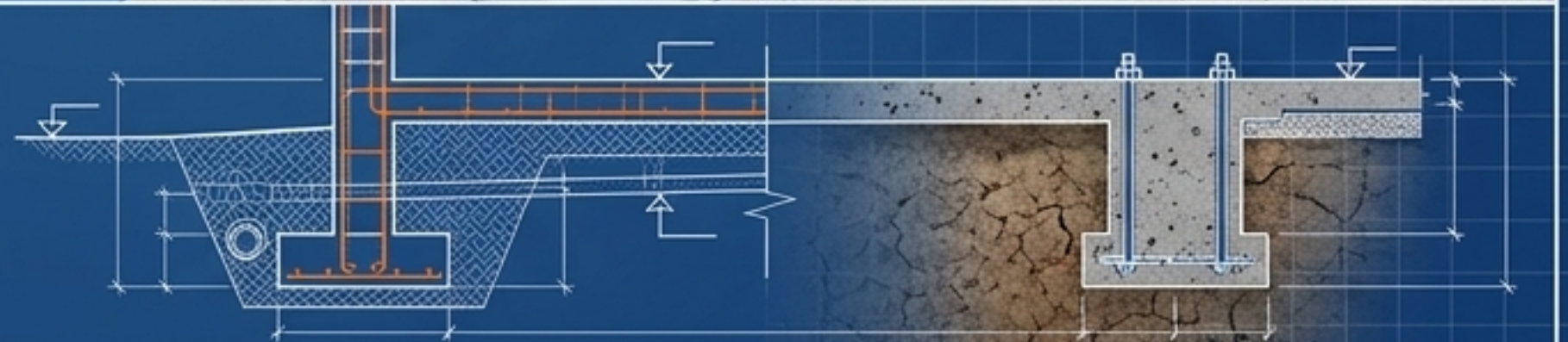
Heat-Adapted Methodologies.

Utilizes strictly monitored curing methods to combat rapid evaporation.



Engineered Precision.

Strict adherence to structural plans, rebar placements, and drainage parameters.



Build on a Foundation You Can Trust.

Foundations | Slabs | Commercial | Industrial | Parking Lots | Repairs
Proudly serving Odessa, Midland, and the surrounding Permian Basin region

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