



Residential Basement ~ \$100,000 to \$250,000

Cooper Lower Level - Beneath the Surface

This basement offered valuable square footage, but little true living space. Low overhead structure, an uneven floor, aging mechanical systems, limited natural light and exposed utilities left the lower level feeling distinctly unfinished. The goal was to transform it into a comfortable extension of the home while preserving as much height—and as much of the original structure—as possible.

The transformation began from the ground up. The existing floor was removed and excavated, making room for a new insulated, heated concrete slab while gaining critical headroom. Because the original foundation walls had no footings, the perimeter was underpinned as the floor was lowered. Plumbing was reconfigured, the boiler replaced and relocated, and electrical and mechanical systems reorganized within the existing framing.

Rather than surrender that hard-won height to a conventional ceiling, the original joists, beams and structural posts were retained, exposed and unified with a deep brown finish. Where utilities required concealment, removable wood slat ceiling panels provide access to the systems above while introducing warmth and becoming a defining architectural element.

The reorganized lower level now includes a dedicated home office, flexible guest bedroom/sitting room, new bathroom, dedicated laundry and improved storage. Enlarged and replaced windows bring more daylight into the basement, while carefully integrated lighting makes the spaces feel open and comfortable despite the constraints of the original structure.

The material palette intentionally balances old and new. Painted masonry, exposed framing and substantial timber structure remain visible alongside warm wood ceilings, finished concrete floors, crisp walls and simple contemporary fixtures.

What was once compromised, mechanically dominated space is now a cohesive and highly functional lower level. The project's greatest constraints—limited height, exposed structure and complex infrastructure—were not simply concealed; they became the foundation for the design.

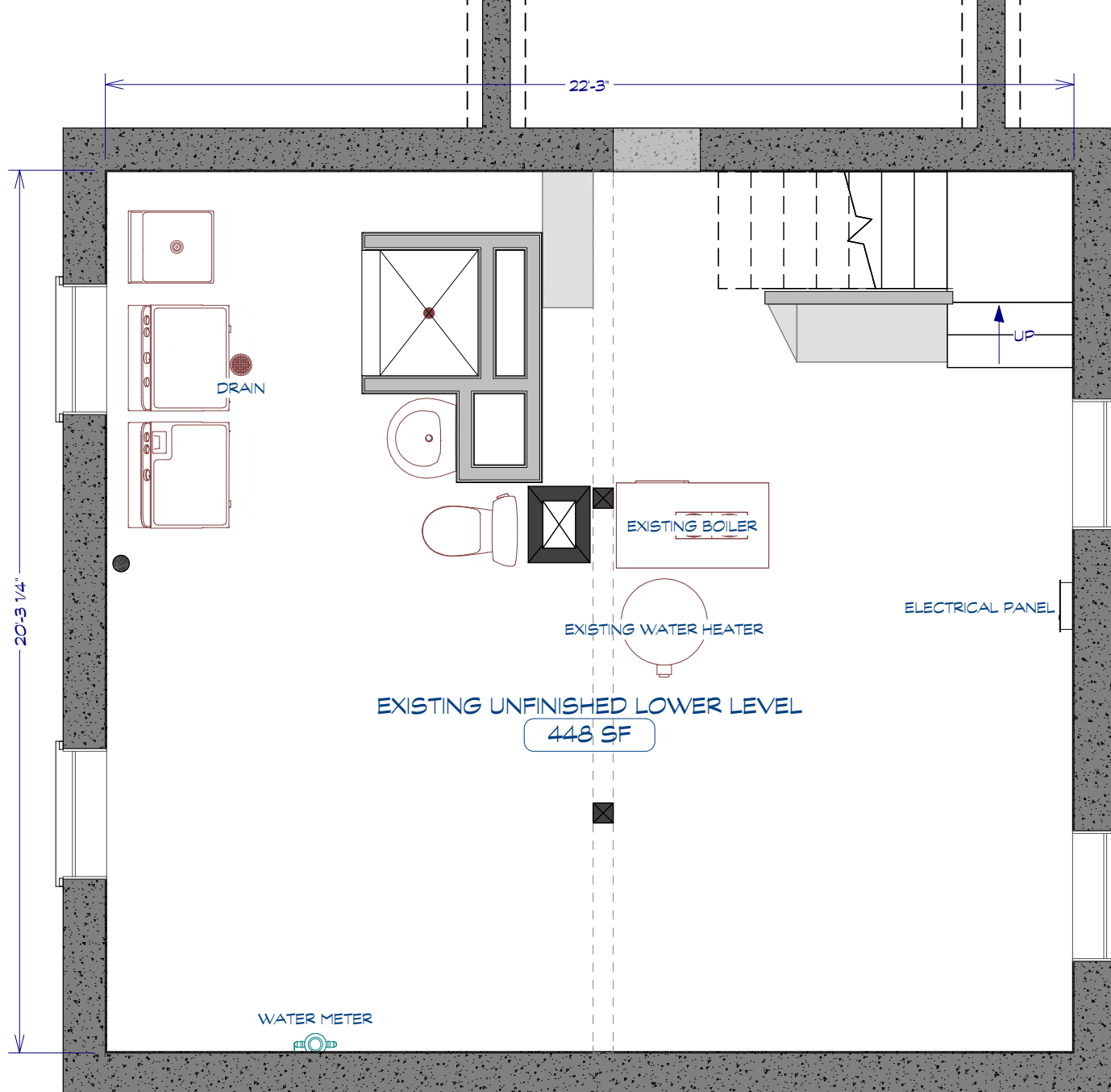
Design Statement

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- *Transform the unfinished basement into comfortable, everyday living space.*
- *Maximize usable ceiling height within the constraints of the existing structure.*
- *Create a dedicated home office to reduce strain on other spaces.*
- *Create a flexible guest bedroom and sitting room separate from the workspace.*
- *Add a new bathroom to make the lower level more self-sufficient.*
- *Improve basement comfort year-round with a new insulated, heated concrete floor.*
- *Increase natural light through new and enlarged basement windows.*
- *Replace and reorganize aging mechanical systems to support the renovated space.*
- *Conceal plumbing, electrical and mechanical infrastructure without unnecessarily lowering the ceiling.*
- *Maintain access to mechanical systems for future service and maintenance.*
- *Preserve and celebrate original structural elements, including exposed joists, beams, posts and masonry.*
- *Create a finished basement that complements the home's age and charm.*

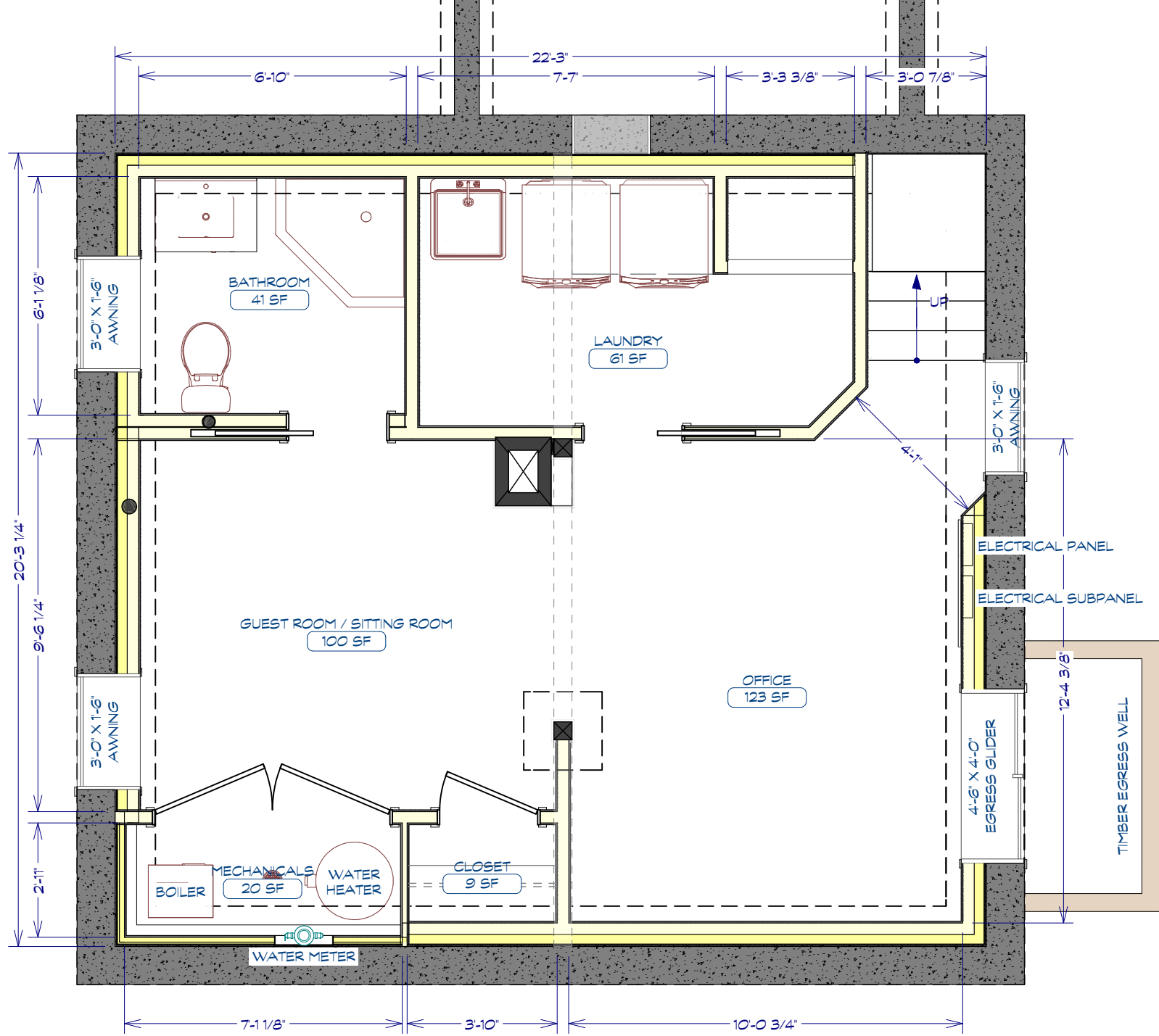
Client Objectives

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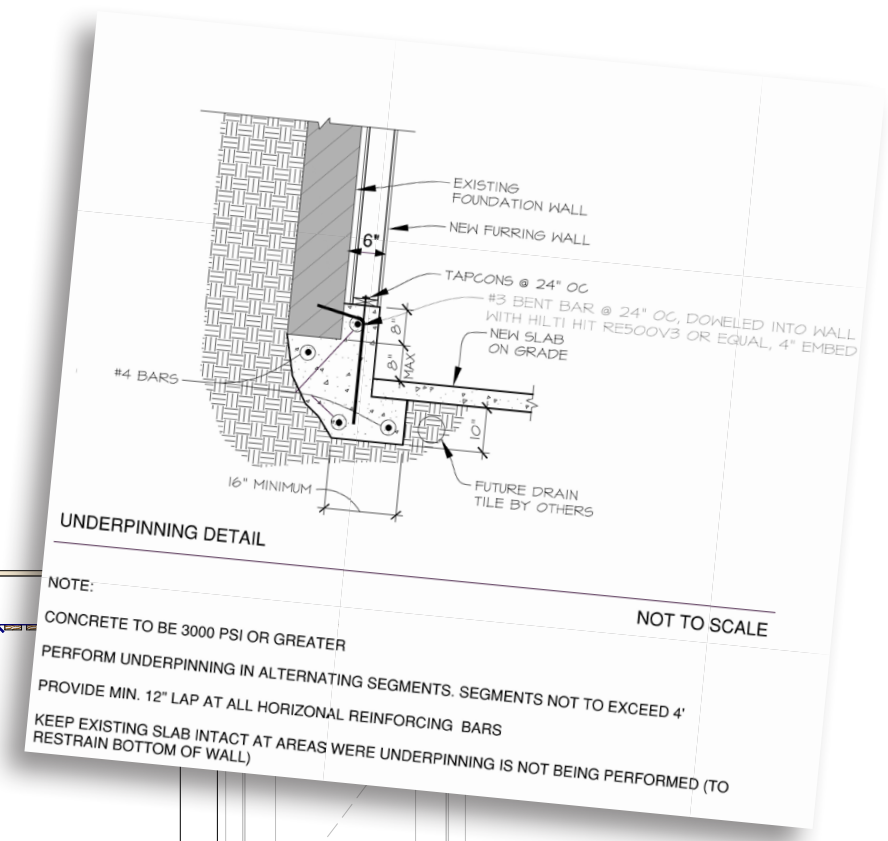
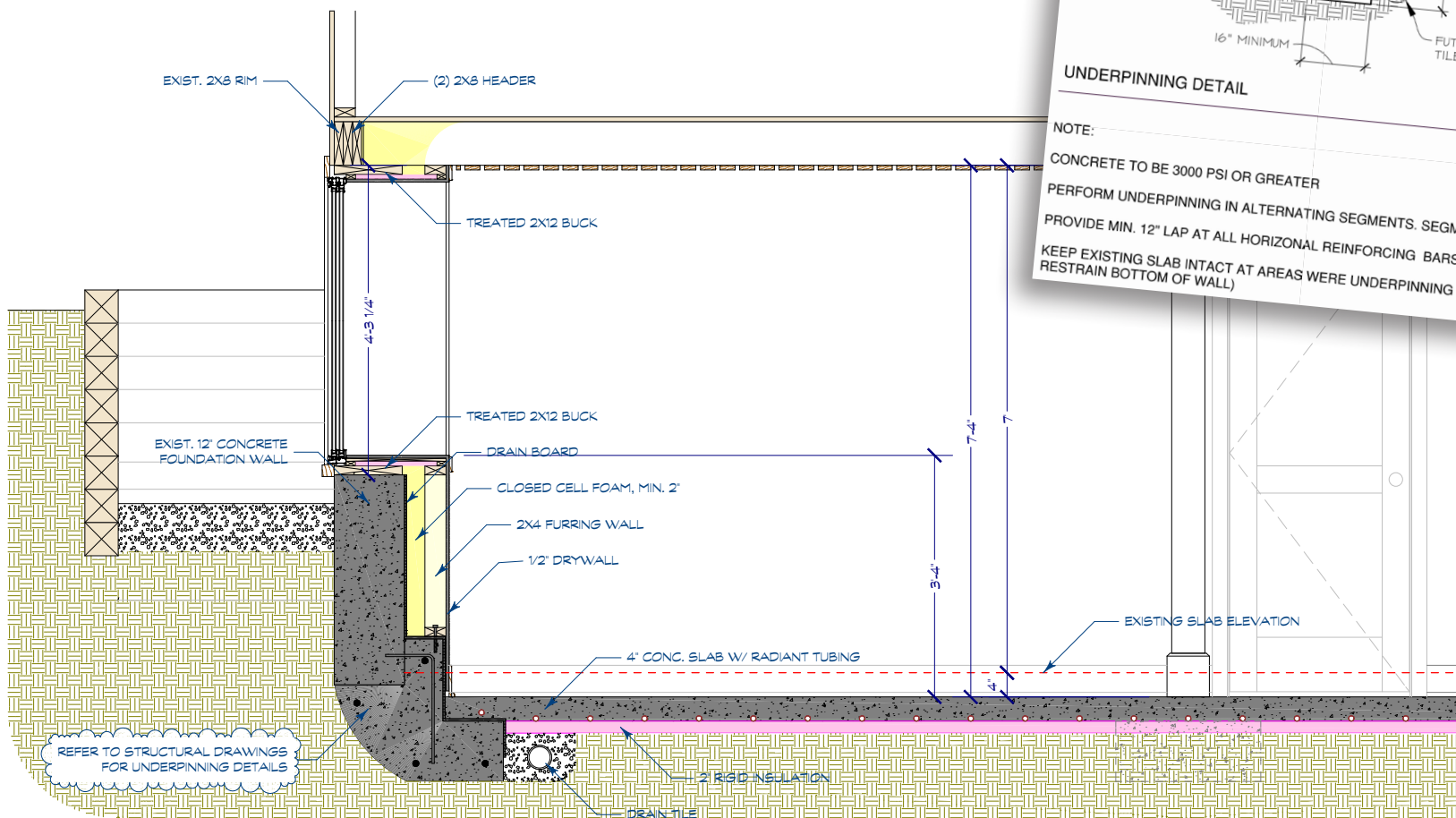


Existing Floor Plan

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After Floor Plan
 Cooper Lower Level - Beneath the Surface



Section at Egress Window with Typical Footing and Underpinning
 Cooper Lower Level - Beneath the Surface



Before

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The unfinished basement was dominated by aging mechanical equipment, exposed utilities, laundry, storage and a makeshift bathroom. Low overhead infrastructure further compressed the space, leaving nearly 450 square feet largely unsuitable for comfortable everyday use.



During
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The original foundation walls had no footings, requiring new footings to be incorporated as the basement was excavated for additional headroom. The walls were underpinned in four foot long sections, allowing the floor to be lowered while maintaining the existing masonry structure.



During
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New underground plumbing and drainage were installed for the reconfigured bathroom, laundry and mechanical systems. Enlarged window openings improved daylight and egress, while perimeter waterproofing and new framed walls strengthened the basement envelope.



During
Cooper Lower Level - Beneath the Surface



Rigid insulation was installed beneath the new slab, with radiant tubing above it to create a warm finished floor without sacrificing headroom. New high-efficiency mechanical systems were consolidated into a compact utility zone, freeing valuable floor area elsewhere.



After

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The completed lower level now feels like an extension of the home rather than a utility basement. Original masonry and timber structure remain visible, while warm wood ceilings, finished concrete floors and improved daylight give the new office a comfortable character.



After

Cooper Lower Level - Beneath the Surface

The office and guest bedroom/sitting room remain visually connected beneath the original structural beams. The removable wood slat ceiling conceals utilities while preserving service access—turning a practical necessity into one of the project's defining architectural features.



After

Cooper Lower Level - Beneath the Surface

A flexible guest bedroom and sitting room now occupy space once overwhelmed by utilities and storage. Original masonry and timber framing remain visible, while the warm slatted ceiling and new window give the compact room an intentional, comfortable character.



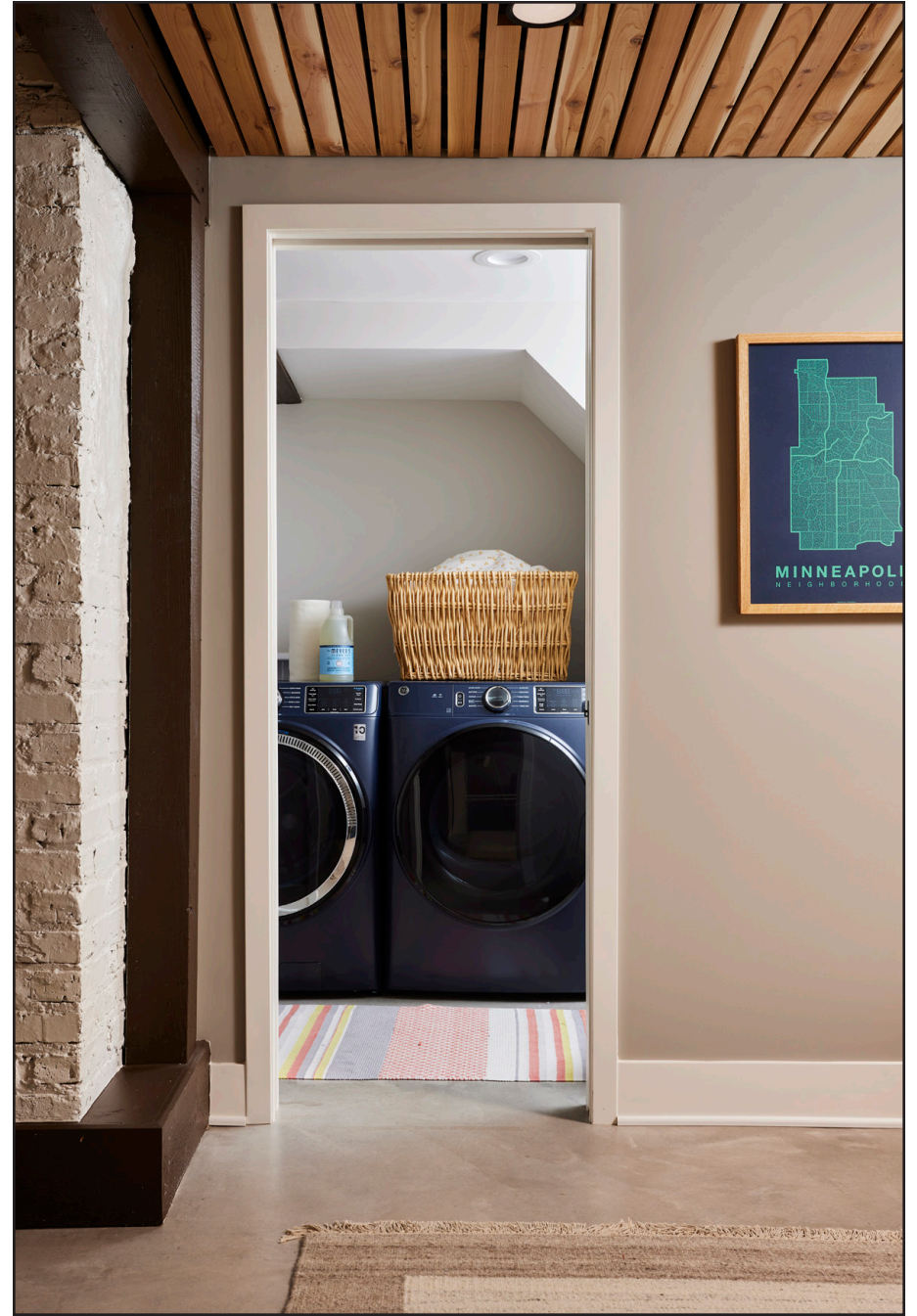
After

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The new guest bedroom/sitting room connects directly to the bathroom, making it equally accessible for everyday use and overnight guests. Simple finishes, integrated lighting and the continuous heated concrete floor create cohesion while preserving the basement's newfound openness.



After
 Cooper Lower Level - Beneath the Surface



A new bathroom and dedicated laundry replace functions previously exposed within the unfinished basement. Both are now compact, purposeful rooms serving the office and guest space while making the lower level a fully functional living space.



After

Cooper Lower Level - Beneath the Surface

Enlarged windows bring more daylight and fresh air into the home office, while the insulated radiant slab improves year-round comfort. Overhead, removable wood slats add warmth while maintaining access to utilities above.