

# MacBick Labs + Interiors

Specialized Lab Design for Wastewater Treatment Facilities



## Introduction

#### **About MacBick Labs + Interiors**

MacBick Labs + Interiors is a WOSB-certified lab design firm with deep experience creating integrated, high-performance lab environments. We specialize in designing spaces that enhance efficiency, safety, and compliance—especially in regulated environments like wastewater treatment facilities.

#### **Purpose**

This packet is intended to showcase our capabilities in wastewater facility lab design, outline our modular and repeatable project approach, and provide decision-makers—such as public works engineers, facility managers, and operations leads—with a clear roadmap for engaging with our team.





# Our Approach

## Design Philosophy: Durability, Safety, Efficiency

- Use of corrosion-resistant and chemical-safe materials
- Ergonomic layouts for technician workflow and safety
- Long-lasting installations designed for low maintenance

#### Sustainability and Regulatory Compliance

- Designs aligned with EPA, OSHA, and local environmental codes
- Integration of energy-efficient lighting, HVAC, and fume systems
- Green building materials and waste minimization strategies

### Integration with Facility Operations

- Strategic lab placement for easy access to process sampling
- Alignment with SCADA and process monitoring systems
- Designed to support day-to-day treatment workflows





# Core Capabilities

#### Lab Layout and Design

- Wet labs, control labs, microbiological and analytical labs
- Workflow-based design with dedicated zones for sample intake, testing, and storage
- ADA compliance, ventilation zones, noise control, and lighting design

## **Equipment Specification and Sourcing**

- Sourcing of high-quality instruments, including Hach spectrophotometers, Fisher Scientific incubators, and Thermo Scientific pH meters
- Custom cabinetry, acid-resistant countertops, and integrated sink systems
- Optional tech add-ons, including VR-based spatial planning via AirLab VR

## Utilities and Infrastructure Integration

- Plumbing for corrosive waste and specialized drainage
- Fume extraction, HVAC balancing, and air quality control
- Backup systems and alarm integration for critical operations

### **Turnkey Project Management**

- Site consultations and needs assessments
- Coordination with MEP engineers and architects
- Procurement, installation, and commissioning
- Staff training and post-installation support





# What to Expect Your Project Journey

#### Tailored Planning from Day One

Every project starts with a discovery session to understand your goals, testing volumes, and compliance needs. We develop a clear roadmap that ensures lab functionality, future growth potential, and regulatory success.

#### Efficient Design-Build Process



#### Concept & Assessment (1-2 weeks)

On-site walkthrough, lab workflow analysis, and initial schematic layout.



#### Design & Procurement (3-4 weeks)

Finalized lab design, selection of materials and instrumentation, and construction drawings.



#### Installation & Commissioning (2–3 weeks)

On-site buildout with integrated utilities and systems testing.



## Training & Handover (1 week)

Technician walkthroughs, equipment tutorials, and maintenance documentation.





# Case Study Snapshot

#### Location

Sample Wastewater Treatment Facility, Colorado

#### Challenge

Outdated lab with inefficient sampling workflow

#### Solution

Installed modular wet lab with integrated SCADA-compatible data monitoring stations

#### Result

Increased sample throughput by 40%, reduced technician error by 25%, and improved regulatory audit readiness





# Certifications & Partnerships



## Women-Owned Small Business (WOSB)

Certified for eligibility in federal and municipal public works contracting.

#### **Additional Certifications**

- OSHA-compliant safety training for installation crews
- LEED-aware material sourcing for sustainable builds

#### **Technology & Equipment Partners**

- AirLab VR for immersive space planning and training simulations
- · Hach, Thermo Fisher, and VWR for lab instrumentation
- Case Systems for casework and cabinetry solutions





## Contact & Next Steps

#### Schedule a Free 30-Minute Consultation

Let's explore your lab's goals, constraints, and vision. Get a tailored project preview and see how our repeatable framework can streamline your next lab build.

Ready to Get Started?

#### Contact

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