



# Statement of Qualifications



## **Program Management**

### **Introduction**

Equilibrium is in the business of the life science work environment. We specialize in the infrastructure intensive facilities necessary to support the activities of research, process development, and manufacturing. Equilibrium has the flexibility to serve as Program Manager, Design-Builder, or Facilities Consultant. Depending on the type of project being pursued, the following is a list of tasks that may be required for a successful project completion:

### **Services**

- Needs Analysis
- Programming Space Requirements
- Architectural Design
- Civil and Structural Design
- MEP Engineering
- Regulatory Consulting
- Validation Consulting/Execution
- Construction Bid Comparisons
- Value Management
- Schedule Tracking
- IT Infrastructure
- Equipment Selection, Procurement, and Installation
- Office Furniture Coordination
- Overall Project Supervision and Dispute Resolution

### **Process**

A key to a successful project is to understand our client's long-term business plan. It is important to begin this process early and work with your staff to understand critical business objectives. Understanding the products and/or services your organization generates, allows our team to anticipate appropriate facility requirements.

We typically begin with a needs assessment to more clearly define your facility goals. Through a series of meetings and data gathering exercises, we will define the required spaces from the front lobby, to the offices, the laboratories and manufacturing areas, to document storage and the loading dock. Our experience in the life science industry allows us to understand your needs and *translate* these needs into a viable design. This design is completely dependent on needs, budget, and schedule.

Design is then integrated into "bricks and mortar" via the construction process. Our service offering couples programming, design and construction into one deliverable, resulting in a more efficient project with enhanced communications. Transition from design to construction is transparent and most often overlaps.



Throughout the entire process, from conception of a facility objective through construction, we will constantly inform and advise you of the risks or benefits associated with decisions. Equally important, we will maintain a detailed project record that will help minimize any project-related disputes. In short, we will guide you through this process in an informed, seamless manner.

In this effort, we are familiar with the various laboratory accreditations, which laboratories may require. This ranges from AAALAC accreditation for animal facilities, to GMP certification for FDA regulated production environments, to the various biosafety levels required to work with potential pathogenic agents. In addition, Equilibrium is familiar with various “decommissioning” protocols necessary to allow for construction/renovation work to occur within a laboratory work environment. This may range from simple disinfectant cleaning to chemical fixative gassing of biologic work environments, including biosafety cabinets and associated ductwork and filters.

## **Design-Build Projects**

Often times, the need arises to have a project handled from "soup to nuts". In this form, Equilibrium takes on the role of a Turn-Key Design Builder. We bring together the appropriate professionals, such as architects and engineers, to assist in the programming of the facility. Then we take this program through design and into construction. This is an extension of our Program Management capabilities, which allows us to deliver the entire project to our clients under a single "contract".

## **Energy Efficiency Audits**

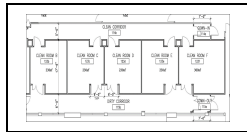
Laboratory facilities are notorious “energy hogs”, resulting in often times double and triple the utility costs compared to traditional office buildings. There are numerous ways to mitigate these elevated utility costs and the intention of our audit is to seek out these potential cost savings. We handle this through physical inspection of the facility, interviews with key facility personnel and department heads, plan and document review, and review of past and current utility bills.

In today’s competitive environment, it is important to trim costs wherever possible. As utility costs continue to increase over time, energy saving implementation becomes paramount to creating an efficient operation. In addition, there are ancillary benefits to these cost saving plans. There is the inherent “good will”, which will aid in public relations and promote an organization as a steward of environmental awareness. Another benefit is realized in employee retention and recruitment, as many workers will prefer to work within an organization that stresses “Green” in their operations.

## Experience

### **Emergent BioSolutions**

Design Build of Process Development labs, with a project budget of \$3 million. Additional renovations to the entire 55,000 square foot facility over a 3 year schedule.



### **BioReliance**

Renovation of BioReliance's facility to facilitate their Cell Banking GMP Manufacturing Operations. The initial project budget was \$4.5 million, and the project closed out in July 2008 with a total cost of \$3 million.

### **ProMetic**

Program Manager for a new cGMP protein purification facility, programmed to include GMP space for multiple product purification and associated ancillary space at an anticipated cost of \$5 million.

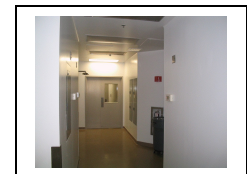


### **Qiagen**

Energy Efficiency Assessment and Facilities Consulting towards creating a more "cGMP" environment. Consulting efforts were focused on the Germantown Campus.

### **Invitrogen**

Program Manager for a cGMP revitalization project to create a new business unit for Invitrogen. The project was to create a cGMP Kit Manufacturing Capacity to compliment Invitrogen's current kit manufacturing offerings.



## Additional Project Experience

- **Emergent BioSolutions** – *Gaithersburg, MD* – Design Build renovations of several facilities, including R&D labs, Process Development labs, office space, and a data center. The renovations are part of a continuing effort by Emergent to update and expand their facilities, as well as adapt to new product development strategies.
- **Advanced BioScience Laboratories** – *Rockville, MD* – Equilibrium served as the Construction Manager, in association with Scheer Partners, to renovate an existing 50,000 square foot facility into a 72,000 square foot facility comprised of cGMP production space, R&D laboratories, and associated administrative support spaces. The total project budget was \$14,000,000.
- **Vaccine Research Center** – *Gaithersburg, MD* – Program Manager/Construction Manager for the renovation of approximately 7,000 square feet, to include process gases, backup generator, laboratory equipment procurement, and general design and construction services. The project was accomplished in conjunction with Alexandria Real Estate Equities and The Henry Jackson Foundation.
- **Fisher BioServices** – *Germantown, MD* – Design Build Contractor for the creation of a Biorepository, including a new HVAC system and a unique electrical distribution system.
- **Armed Forces Radiobiology Research Institute** – *Bethesda, MD* – Various ongoing projects to renovate and update existing radioisotope labs and vivarium facilities on the campus of the National Naval Medical Center.
- **Intercell USA** – *Gaithersburg, MD* – Construction Manager for several projects ranging from the installation of a GMP cold box and associated architectural finishes, to a 15,000 Pilot Plant Upgrade for the production of vaccine products.
- **Jupiter BioScience** – *Frederick, MD* – Program Manager for a new 9,000 square foot Analytical Chemistry and GMP Production facility to house Jupiter’s US operations. The design integrates and energy efficient VAV supply and exhaust system coupled with low flow fume hoods, to reduce first costs and future operating expenses.
- **BioReliance Corporation** – *Rockville, MD* – Project Manager for several projects, including a new Cell Banking facility, R&D laboratories, a P-3 laboratory and various office/administrative projects. Jason managed all aspects of this projects, including the design, construction, and validation of the new facility.
- **Bridge Pharmaceuticals** – *Gaithersburg, MD* – Currently managing a small laboratory renovation project at Bridge’s Maryland Headquarters.
- **Invitrogen Corporation** – *Frederick, MD* – Project Manager for the renovation of Cell Banking’s cGMP facility. The facility is a 3,000 square foot, Class 10,000 cGMP sterile facility. Served as the

project manager and construction manager, handling all of the project details and ensuring completion within budget constraints and a 6-week construction schedule.

- **UPM Pharmaceuticals** – *Baltimore, MD* – Project Manager for Construction Management Services for the installation of a class 100,000 cGMP clean room facility. The project consisted of approximately 2,500 square feet of manufacturing space and approximately 10,000 square feet of analytical chemistry labs, R&D labs, and associated administrative space.
- **Qiagen** – *Germantown, MD* – Management Consultant facilitating Qiagen in bringing their new North American Headquarters facility online. The project involved working with Senior Management Staff to focus on the project schedule of getting all major systems including manufacturing, distribution, and quality systems up and running within target dates.
- **McKesson** – *Rockville, MD* – Construction Management Services of a mezzanine deck and a walk-in freezer storage area for McKesson’s pharmaceutical repository capabilities. The project included building the freezer storage unit into the concrete slab to allow for forklift access and installing an Intergen fire suppression/pre-action sprinkler system.
- **Covance Laboratories** – *Chantilly, VA* – Project Manager for the build out of 25,000 square feet of laboratory and administrative space for Covance’s new Immunochemistry contract research facility. The project included an aggressive schedule with fit-out completed in under four (4) months and within budget.
- **Beta Rubicon** – *Fayetteville, AR* – Consulting services on the preparation of a white paper on Biomanufacturing for NIST. The purpose behind this paper was to establish the current market and demand for biomanufacturing facilities as biotechnology companies ramp up research and development efforts to full-scale manufacturing.
- **Intronn** – *Gaithersburg, MD* – Project Manager for the fit-out of approximately 10,000 square feet of laboratory and administrative space. This project included the installation of common laboratory equipment and systems for the future expansion of 25,000 square feet of space in what was designed and programmed as a later stage biotechnology incubator facility.
- **Aptus Genomics** – *Gaithersburg, MD* – Construction Manager for the fit-out of approximately 12,000 square feet of laboratory and administrative space. The project was completed on an accelerated schedule and a reduced budget.
- **MdBio** – *Frederick, MD* – Project Manager for the construction of a mobile laboratory within a tractor-trailer. The purpose of the mobile lab is to travel from school to school within Maryland and educate high school students in the biotechnology industry.



## References



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