

## BARRAGÁN + FERRER ARCHITECTS LLC

## The Company

Barragan + Ferrer Architects is an experienced and dynamic architecture, urban design and forensic firm based in San Juan, Puerto Rico with a satellite office in Miami, FL. The firm engages a diverse range of work, from large scale institutional and residential buildings to interiors and speculative commercial projects, and realizes innovative solutions that turn the very constraints of each project into the design trajectory, exploring opportunistic overlaps between space, program, form, budget and materials. The firm's studio is a multidisciplinary talented practice with a diverse portfolio of architectural and urban projects that carry its brand of originality, design innovation and construction detailing excellence. The studio skills are tempered with its determination to deliver a quality product within the financial and time restrictions of the client's needs with a strong regard for environmental issues.

The Firm combines rigorous design with construction management experience - an energetic combination that leads to a distinctive design process and an end product that is aesthetically and intellectually rigorous as well as financially informed. The design values are modern: proficiency, lucidity, exquisiteness, authentic expression of materials, and clean lines and forms that allow the architecture itself - the space, light, materials, spatial relationships - and inhabitants to thrive. The result is an architecture that is current but timeless, serene yet warm, and universally rational while also being uniquely reflective of the values and characters of the clients.

#### Firm Members

**Juan A. Barragán** is an architect and urban designer with over 25 years of experience providing architectural, planning, of public spaces, residential high rise, institutional buildings, single and multifamily housing, and large-scale mixed-use developments. With offices in San Juan and Miami, Juan Barragan, founding Principal at Barragan + Ferrer Architects, has taught as assistant teacher at the University of Puerto Rico and the Polytechnic University. During his early practice years and academic work, he obtained from Architect Efraín Pérez Chanis, a former Charles-Édouard Jeanneret-Gris, Le Corbusier, apprenticeship, full guidance, teaching and support.

Architect Barragán prepared several master plans and community design guidelines for several public and privately owned housing projects. Also, he created several boutique residential projects of detached houses for the Floridian National Golf Club located in Palm City Fl. In addition, he designed High-Rise buildings in Fort Lauderdale, Brooklyn and Manhattan NY. In Puerto Rico, he collaborated on several High-Rise and complex projects such as: Aquablue in Hato Rey, Aquamarina in Condado, Ocean View in Isla Verde and Ocean Club in Fajardo PR.

Arch Juan Barragán is a pioneer in CNC (Computer Numeric Control) technology, architectural fabrication programing, techniques and equipment, since he designed and implemented the first fully automated metal fabrication shop in Puerto Rico for a local architectural product manufacturing firm. Also, he is a building facilities manager and maintenance expert and



demonstrated the most efficient protocols and accountability strategies to maintain the Sagrado Corazon University campus in San Juan PR, consisting of 40-building and grounds.

**Vincent Ferrer** is an accomplished architect with 20 years of experience working with a diverse client portfolio including public and private entities. He is NCARB certified and a registered architect in the State of Florida and the Commonwealth of Puerto Rico. He received his Bachelor Science in Architecture from the University of Wisconsin in 1997 and his Master of Architecture from the University Of Miami in 2001.

His academic involvement entails Teaching Assistant for Prof. Fernando Plás at Universidad Interamericana-San Germán Puerto Rico in 1996, Teaching Assistant for Prof. Armando de León at University of Miami in 1999 and Teaching Assistant (Study abroad at Italy, France, Spain and Greece) for Prof. Tomás Lopez Gottardi at University of Miami in 2000.

His work experience includes architecture firms such as the Zimmerman Design Group at Milwaukee Wisconsin, Hall & Bell Landscape Architects at Miami Florida, Nichols Brosch and Sandoval at Miami Florida and Jose Ramirez Architects at San Juan Puerto Rico. Key background practice ranges from healthcare design, hospitality, to commercial and industrial design.

He founded Vincent Ferrer Architects in in San Juan Puerto Rico on 2010 with a design assortment that includes residential, elderly housing, historic restoration and preservation, commercial, and hospitality.

In 2018 he founded a join partnership with Architect Juan Barragan, Barragan + Ferrer Architects remaining as a design firm and consultants for Cordero Frontera Architects, JHME Real Estate Advisor on elderly housing and Halliwell Engineering Associates in Forensic Architecture on the aftermath for Hurricane Maria in Puerto Rico in 2017-2018.

## Services During Programmatical and Building or Site Analysis

## MASTER PLANNING

A critical part of the visioning process, the master plan looks beyond the present and establishes a road map for future development. All of the services listed under the Visioning heading are often included in the Master Planning process.

#### EXISTING BUILDING SURVEY

A documentation of existing building conditions as a starting point for subsequent work.

#### **FACILITY ANALYSIS**

An evaluation of the architectural, structural, mechanical and electrical components of an existing facility in regards to functionality, condition, architectural merit and code compliance.



#### **PROGRAMMING**

We use a systematic approach to determine the spatial needs of the anticipated users of a facility through a series of questionnaires and interviews. This compilation of spaces or building program also include specific requirements such as spatial qualities or configurations, acoustical qualities, HVAC and lighting, daylighting and the necessary relationship between spaces. The program is the backbone of any building project. When working with churches, our "all inclusive" process also serves to build advocates for the project.

### SITE ANALYSIS AND SELECTION

This evaluation identifies all aspects that may influence the development potential of an existing site or multiple prospective sites. The analysis examines physical features like topography, vegetation, solar and wind exposure and on-site or neighboring structures. It also considers regulatory limitations such as zoning, stormwater management, impervious coverage, forestation, flood plains and parking requirements.

#### SITE PLANNING

Based on the information gathered in the Site Analysis and Building Program this is a process of examining possible configurations for development of a particular site. Often done as part of a feasibility study. We often work in conjunction with our consultant civil engineers, land planners and landscape architects.

### SCHEMATIC DESIGN

Also referred to as concept or preliminary design, this is the first stage of the design process and where buildings first take shape. We often use Google Sketch Up to generate three dimensional digital models of these early designs.

#### **RENDERINGS**

We use renderings to communicate our design. We also provide renderings that can be used for promotional, fund-raising and marketing purposes. In addition to two-dimensional renderings, we also can have videos produced that promote a project with three-dimensional images.

#### **COST ESTIMATION**

Like design, cost estimation is usually very preliminary in the beginning and will become very detailed as the design develops. Depending on the level of detail required, we use various methods including rough square foot cost based on historical data, cost estimation software which uses a regional cost database, general contractors and cost estimating consultants.



#### FEASIBILITY STUDY

We can provide, either in-house or through the use of external consultants, a feasibility study for a proposed project. The study usually includes many of the services previously listed, in addition to a financial analysis that aims to predict whether a project will meet an owner's financial expectations.

#### LEED® ANALYSIS

We encourage all of our clients to build green. For those that chose to certify their efforts, the most widely used system is the US Green Building Council's LEED Green Building Rating System. We are qualified and experienced to guide you through the process. The LEED Green Building Rating System is a voluntary, consensus-based national rating system for buildings designed, constructed and operated for improved environmental and human health performance. LEED addresses all building types and emphasizes state-of-the-art strategies in five areas: sustainable site development, water savings, energy efficiency, materials and resources selection, and indoor environmental quality.

#### INTEGRATIVE DESIGN

An integrated design process is essential to meeting goals for green building, cost controls, system performance and limited time schedules. An integrative process involves all of the design team members early in the process and communications between members is crucial. As the lead firm on a project, we see that all parties have a clear understanding of the whole building rather than just their own discipline.

# PRODUCING Services During Design and Previous to Construction

## **DESIGN DEVELOPMENT**

During this process the schematic design is developed in response to further thought, in-depth code review, material research, mechanical and structural system identification and site design development.

#### CONSTRUCTION DOCUMENTS

The documentation that is necessary for bidding, permitting and construction of the project. The documents produced include drawings and specifications.

#### LEED® FACILITATION

If LEED rating is a goal for a project, the strategies are identified during the Visioning phase and the majority of the integration of those strategies into the design and documentation happens in the



Producing phase. Our design team will consist of LEED Accredited Professionals in every discipline to assure that the goals are met.

#### BUILDING INFORMATION MODELING (BIM)

BIM is the process of generating and managing building data during its life cycle. Typically, it uses three-dimensional, real-time, dynamic building modeling software to increase productivity in building design and construction. The goal is to have the design, construction and ownership team members use the system to maximize its potential.

#### INTERIOR DESIGN

We take an integrated approach to interior design and consider it part of the building design rather than decorations that are applied to the building. Although, most of the design work is done by our staff we may use consultants for furnishings.

#### TENANT IMPROVEMENTS

Sometimes called "tenant fit-out", this process of designing within a building shell is often used for retail or office uses. We have designed tenant improvements buildings designed by us and others.

## REALIZING Services During Bidding Process and Construction

#### BIDDING AND NEGOTIATIONS

This is the process of securing a contractor. We sometimes collect multiple bids either through advertisement or invitation and sometimes we negotiate with a single qualified contractor. In a bidding situation our services often include qualifying bidders, responding to questions, issuing addenda, collecting bids, evaluating bids and making recommendations to the owner. We also will assist the owner in negotiating the construction contract.

#### CONSTRUCTION ADMINISTRATION

We serve as the owner's representative during the construction of a project. In a traditional design, bid, we act as intermediary between the owner and contractor. Our role is to see that the building in built as designed. Our services often include pre-construction meetings, on-site observation, progress meetings, approval of contractor schedules and payments requests, shop drawings, submittal reviews, change orders issuance and certification of substantial and final completion.

DESIGN - BUILD

Over the years we have delivered many projects using the design/build approach. In some cases



our firm has been both the architect and contractor and in others we have worked in partnership with a general contractor. This approach is typical for tight schedules or very complex projects.

#### CONSTRUCTION MANAGEMENT

Usually on projects of limited scope, we can manage the construction of a project. This would entail hiring multiple prime contractors, overseeing construction and the project schedule.

#### LEED® FACILITATION AND CERTIFICATION

Part of the LEED certification process involves verification and documentation during the construction process. We collect this data from the contractor through the submittal process and verify that the requirements are met. We submit the required documentation to USGBC for certification.

#### **POST CONSTRUCTION**

Our services after construction is completed, include inspection and analysis to ensure that requirements have been met and documentation of as-built conditions, commissioning and user surveys.

## Forensic Architecture Services Provided in Joint Venture with Halliwell Engineering and Associates

B+F Architects collaborate as an expert consultant with Halliwell Engineering and Associates, provides forensic architectural services for law firms, insurance companies, HOAs, contractors, developers, sureties, and adjusters. We have extensive experience in all building types, and have worked on claims involving construction deficiencies and design deficiencies.

B+F Architects' architectural experts may provide a wide range of litigation support services that include evaluations of the Architect's Professional Standard of Care, performing forensic investigations of potential construction defects, and conducting ADA/Accessibility analysis. Our expert reports are Instrumental in resolving construction-related disputes.

## Construction Defect Liability Analysis:

Our team provides architectural expertise as needed to determine the cause and origin of construction defects. Our experts provide opinions regarding the parties responsible for such defects as well as provide repair recommendations and detailed costs of repair estimates for correcting defects and damages. Our team of architects provide clear and concise expert reports that are instrumental in resolving disputes involving construction deficiencies.



## **Building Envelope Investigations:**

Highly qualified experts conduct analysis of building component failures, provide property condition assessments (PCAs), perform third party building envelope reviews, and coordinate field testing on building components. We have decades of experience evaluating claims related to construction and/or design defects that result in building envelope failures.

Premise Liability (Slip & Falls) Assessments:

We provide consulting for premise liability cases. Our experts analyze the environment in which the accident occurred, study all relevant building codes and standards, and provide detailed reports summarizing our findings.

Architectural Standard of Care Assessments:

Many construction-related disputes involve assessing the quality of work performed by an architect. Our architectural experts analyze project documentation and will submit and opinion on the work performed.

## Forensic Architecture Findings by Division and Investigation Type

Water/Moisture Intrusion: Water Damage Analysis, Water Proofing Investigations

Building Cladding Systems Damage: Glass, Stucco, EIFS, Masonry, and Wood

Glass and Glazing Damage: Design, Materials, Standards, Damage Testing Analysis, Repair/Replacement Analysis.

**Roofing Systems Damage:** Design Analysis, Installation Investigations, Damage Testing Analysis, Repair/Replacement Analysis

**Building Materials:** Specifications, Analysis, Testing, Damage Analysis, Evaluation of Requirements, Repair/Replacement Analysis, Recommendations.

### **Building Code Investigations:**

Analysis of upgrade requirements/availability based upon the scope of damage and required scope of restoration.

Applicable Code(s) and Versions

Negotiations with Code officials regarding upgrade applicability and requirements.