

BALA CONSULTING ENGINEERS NEW YORK

FIRM INFORMATION

Bala Consulting Engineers is a multi-discipline engineering and design organization comprising more than 200 engineers, designers, and support personnel. Established in 1982, Bala services educational, commercial, institutional, and industrial clients. We are privately held and actively managed by our Principals. Our staff is licensed to practice in 45 states and have completed projects both nationally and internationally.

Bala's mission focuses on People, Environment and Well-being. We are built on relationships first — relationships with our staff, clients and business partners. Bala's culture creates an environment for relationships to thrive and careers to flourish, helping our employees and clients achieve their personal and professional goals. Our passion and thought leadership for sustainability coupled with ideation focuses on creating an improved quality of life – for people and the environment. We create meaningful relationships and spaces that connect all people.

40 +**YEARS IN BUSINESS**

200 +**EMPLOYEES**



OFFICE LOCATIONS

PHILADELPHIA, PA (Headquarters) 1285 Drummers Lane Wayne, PA 19087

> **BALTIMORE, MD** 8140 Corporate Drive Suite 150 Baltimore, MD 21238

NEW YORK, NY **1 William Street** 2nd Floor New York, NY 10004

BOSTON, MA 52 Temple Place Boston, MA 02111

WASHINGTON, DC 1515 Wilson Boulevard Suite 710 Arlington, VA 22209

BALA IN NEW YORK

Bala has decades of experience and established relationships serving the New York region. We opened our flagship New York City office in 2014 to expand services to the local and regional market, bringing an array of engineering expertise to multi-family, corporate, mission critical, science & technology and public projects.

The office is led by industry veterans who have honed their market expertise to deliver unique applications that are vital to project success.

BRADLEY D. WILLIAMS - Managing Director - 27 Years > NYC Bradley D. Williams is Managing Director and oversees office operations and key markets including commercial, residential, interiors and financial institions. He has led a broad range of projects, including ones for numerous large clients such as Rockefeller Center, Deutsche Bank, and JPMC.

Practices SOL H. HECHT - 30 Years > NYC Sol Hecht is the Director of Operations and a driven Mechanical leader in the building design and construction industry. Electrical He has contributed to complex projects in commercial, healthcare, residential and education sectors including Plumbing / Fire Protection 50 UN Residential, Four Seasons Hotel, Waldorf Astoria, Columbia University, Lehigh College, Ithaca College, Structures and the Jacob Javits Convention Center renovation. Technology **51010** PROJECTS Commissioning Sustainability

POINTS OF CONTACT

BRADLEY D. WILLIAMS, PE Vice President Managing Director | NY bdw@bala.com t: 212 857 9401

SOL H. HECHT, PE Director of Operations | NY shh@bala.com t: 646 216 3221

CRISTINA MARTINEZ Director of Business Development | NY CMartinez@bala.com t: 201 207 5680



BALA REPRESENTATIVE EXPERTISE

MULTI-FAMILY MISSION CRITICAL

CORPORATE INTERIORS ADDITIONAL MARKETS

MULTI-FAMILY

Creative Engineering Solutions for Multi-Family

Designing urban environments requires creativity for these unique, densified structures. This necessitates the evaluation of diverse systems/solutions, incorporation of flexible spaces and sustainability/resilience practices, and increasing amenities.

Bala has diverse experience across high-rise urban projects, low-rise mixed use suburban and residential conversion. We understand the complexities of multi-family construction, whether new, upgrading or converting from office space or other prior uses. With an exceptional understanding of a building's structural needs and internal systems, Bala has designed marguis structures in key cities including Philadelphia, Boston and Nashville, and across the New York region, including the Lower Hudson Valley/Westchester, NJ and CT.



Signature Projects

7-11 SOUTH BROADWAY White Plains, NY

LEFRAK Jersey City, NJ

EDGE ON HUDSON Tarrytown, NY

JULIETTE White Plains

THEATER SQUARE Newark, NJ

OFFICE TO RESIDENTIAL CONVERSIONS

With a growing surplus of tenantless office spaces, and other opportunities for adaptive reuse in the city, many building owners are considering, or actively starting programs to reappropriate unused and underused space.

Bala has developed a proprietary set of standards for analyzing the convertability of a building with considerations for ceiling heights, electrical, plumbing, HVAC, and fire prevention systems to assess the viability of a program on a buildingby-building basis. This informs an owner early in the process to help anticipate potential issues that could impact project schedules and financial considerations.



Design of a multi-family residential building is fundamentally about addressing the experience of traversing three doors: front door, elevator door and residence door. As we move through each, the security profile and privacy expectations change dramatically.

in tenant services.



Technology Advancements in Multi-Family Residential Buildings

Nowhere else is technology's multifaceted impact on how a user experiences the built environment as clear as inside a multi-family building. Divided into three facets: utility, amendity and access, Bala provides holistic technology design and details the procurement and monetization plan to deliver a resilient building ready for the next major leap

Project Highlight THE COVE

• 380k+ SO FT

The Cove is a multi-phase waterfront redevelopment project which is a part of the Grand Jersey Redevelopment Plan. Bala is the select MEP/FP engineer for phase 1 which delivers a 19-story residential tower with amenity areas, retail and a parking garage.

The building will consist of 475 rental units and 50,341 of podium linear residential units wrapping the garage area.

The Cove will create a full programmed, pedestrian-friendly, mixed-use "15-Minute City" that provides the people who live, work and play ni the development everything they need within a 15 minute walk. Amenities include: outdoor courtyard, garage rooftop swimming pool and sweeping riverfront and Manhattan views.

CORPORATE INTERIORS

Re-Energizing the Office

The office environment, whether a new development, corporate heaquarters or tenant improvement space, is one of Bala's primary markets. We are engineering the future to make offices smarter, more flexible, and energy efficient.

Today, companies are being challenged to entice employees back to the office full-time, or at least several days a week. To achieve this many have turned to updating or creating new beautiful, amenity-filled spaces. Designing for light, privacy, entertainment and employee well-being has moved to the forefront in corporate spaces.

Bala's services span all project phases from site selection and space planning through preliminary and detailed design, bid documentation, contract administration and postconstruction support. For existing structures, interior upgrades can be evaluated through feasibility studies and condition surveys.

We have completed millions of square feet for corporate headquarters and tenant fitout projects and with 40+ LEED Accredited Professionals on staff, we are committed to sustainable design.



Design Applications





Project Highlight **SAP Hudson Yards**

- 135k+ SQ FT
- MEP/FP, Voice/Data Engineering

SAP's Global Marketing Office occupies the top give floors of 10 Hudson Yards -South Tower with premium amenity and functional spaces . SAP chose Bala to provide engineering servics for their global showcase space featuring a Next Gen Lab, an Immersive Wall and their impressive Executive Briefing Center.

The space features power, connectivity, HVAC comfort in a state-of-the-art environment for employees, clients and visitors. It also spotlights the HANA Cloud showcase.

Bala provided structural cabling design including Category 6a and OM4-grade fiber optic cabling between the main computer room and each of the 5IDF locations. We also provided integrated cabling system design to support A/V and security system requirements.

NYC Signature Projects

SAP HUDSON YARDS

VERA INSTITUTE OF JUSTICE

SIG - 140 BROADWAY

DEUTSCHE BANK New York | Chicago | San Francisco | Baltimore

COZEN O'CONNOR

THE AFRICA CENTER

MURTHA CULLINA

MISSION CRITICAL Helping NYC Manage Critical Infrastructure for a Safer City

Bala has been at the forefront of providing critical and technologically advanced engineering for more than four decades for data center, mission critical, commercial, industrial and institutional clients. We have a rich project history in New York City solving complex engineering challenges and specialize in working on "live" facilities to upgrade or implement infrastructure systems while maintaining ongoing operations.

Technology is rapidly changing the way critical infrastructure and data centers are designed and utilized. Bala's expertise in adapting leading technology through engineering solutions that anticipate specific demands of a project and are developed to efficiently deliver, monitor and control power utilization, sustain critical operations, as well as minimize risk, cost and construction chaos.

Project Highlight PSAC I & II New York City Emergency 911 Center

The Public Safety Answer Center (PSAC) I facility is NYC's primary site and support critical facility operations for the city's E-911 Center, NYPD, FDNY and the Department of Information Technology and Telecommunications (DoITT). Bala performed the original engineering designs for the fit-outs and has performed multiple projects since then.

PSAC II is NYC's redundant site supporting the same operations as PSAC I. Bala performed a Facilitu Conditions assessment to identify potential single points of failure in the existing critical systems infrastructure, and engineering design to upgrade the building's critical power, cooling, controls and fuel oil systems.



Signature Projects

PSAC | & ||

1547 Orangeburg, NY | Portland, OR | Lanai, HI ONE POLICE PLAZA NJFX DIGITAL REALTY TRUST MACQUARIE I.P. MORGAN

Master Planning for Data Centers

Bala offers clients a distinct advantage in three critical aspects of MEP Engineering of data center projects:

SYSTEM PLANNING

System selections are important in providing the most cost effective solutions with the focus on energy efficiency and the lowest Total-Cost-of-Ownership (TCO) for the life of the facility. Developing the appropriate Tier level(s) target and options are key drivers for the overall facility design concepts when addressing issues of capacity, redundancy and future expansion.

Optimizing the design is a crucial factor for providing a facility dynamic flexibility, energy efficiency. This

Unique Services

Risk assessment
Site selection
MEP/FP Engineering
Integrated Technology Systems/Security
Computational Fluid Dynamices
Data Center Migration/Relocation
Structural Engineering
Building Information Modeling
Integrated Systems Testing
Operation & Maintenance Programs

DESIGN OPTIMIZATION

adaptable scalability and will help meet program requirements and value over the life of the facility.

COST & VALUE MANAGEMENT

The Management of Cost and Value are two core financial issues when designing successful data center projects. Cost managment is critical to the success of the initial construction and the management of "value" yields a quality facility for the capital invested.

Managing these issues provides a practical, cost effective, best-in-class facility that is highly adaptable to meet the needs of future technologies.

ADDITIONAL MARKETS & SERVICES

PUBLIC

Public agency projects vary in building types and uses, each bringing a different set of challenges and priorities.

Bala's experience in traditional and alternative project delivery models is essential for working collaboratively with all project stakeholders to deliver innovative and efficient solutions. Our engineering designs meld agency project requirements with architectural necessities to achieve project success for all parties.

SCIENCE + INNOVATION





Bala's expertise in this market includes new construction, expansion, lab conversion and renovation projects, as well as modernizations to adapt spaces to new technologies and ever-evolving scientific research.

Project Highlight Edge Works at Scitech Scity Jersey City, NJ

120k SF

Owned by Liberty Science Center, this new curated community or "minicity" will be made up of four pillars and is for tech entrepreneurs, scientists, students and other forward thinking people and organizations. Bala was chosen to perform engineering and design services for the research and lab space, called Edge Works.

Bala's technology team is leading the structured cabling, physical security and audiovisual design. Bala is advising on best practices for IoT technologies to support a unique multi-tenant lab environment and is leading design and RFP management for an exterior feature video wall element that will act as a focal entry point to the campus.

SUSTAINABILITY

Unique Services



EV CHARGING

Bala has the capabilities to vet the infrastructure and capacities of new or existing sites and buildings, to maximize electric vehicle (EV) charging stations. Bala has successfully coordinated with existing services and implemented EV charging infrastructure ranging from 13,200 Volt substations to secondary distribution support systems.

Bala provides study and design services including metering and load analysis to determine electrical infrastructure upgrades for additional charging stations, or to maximize EV charging within the constraints of the current infrastructure. Our structural engineering group also provides structural design for gantries supporting EV charging locations for larger vehicles, buses, and trucks as well as provides structural anaylsis of garages to account for the additional weight of the vehicles.

BUILDING ELECTRIFICATION

Designing all-electric buildings and using renewable energy are some of the most feasible and effective solutions to reduce buildings' GHG emissions. We understand the value and importance of all-electric design to meet carbon neutral and netzero goals together with our clients and we offer the optimal engineering strategies and building solutions. Our expertise in All-Electric design ranges across industry and building-type.

NY LOCAL LAWS (LL84, 87, 88, 97)

Bala is thoroughly familiar with New York City's new local laws that are being applied to existing and new buildings over 25,000 SQ for building benchmarking (LL84), energy audits & retro-commissioning (LL87), lighting upgrades & sub-metering (LL88), energy efficiency ratings and emissions limits (LL97). We can help you develop strategies for meeting these requirements and, most importantly, avoiding the fines that are coming up 2025 for lack of compliance.

CLIMATE RISK & RESILIENCE

Severe climate events are becoming increasingly more common, and their impact on New York City is apparent with storm surges and flooding in all of the Boroughs. We provide not only proactive climate analysis and solutions but also retroactive design solutions.

Tailored engineering solutions focused on User Experience, Sustainability, Equity, Integration, and Evolution.

BALA

PHILADELPHIA | NEW YORK | BOSTON | BALTIMORE | WASHINGTON,