



## **Climate Resilience Template for Buildings Vendor List**

In December 2018, A Better City (ABC), on behalf of the Boston Green Ribbon Commission's (GRC) Commercial Real Estate Working Group, conducted market research to identify experienced professionals who can assist commercial real estate developers, owners, and managers (1) asses climate risks posed to their properties, (2) develop recommendations that can lead to comprehensive mitigation plans, and (3) implement mitigation measures.

Recognizing that Boston's real estate community faces new threats from changing climate impacts, the GRC and ABC seek to support its members and the commercial real estate sector writ large by developing resiliency resources that can decrease the exposure of Boston properties to extreme heat, extreme precipitation, and flooding associated with both sea level rise and storms. Property owners and managers have expressed interest in seeking external support for resilience planning and wish to understand available resources and service providers to support their current stage of resilience planning. ABC developed a Request for Information (RFI) from qualified professionals able to assist clients in all or a subset of the following areas:

- 1. Identify climate risks in Boston that are relevant to the client's property;
- 2. Establish a property baseline for client to understand the building's characteristics and assets:
- 3. Conduct a vulnerability analysis to determine the exposure and sensitivity of the client's property to climate impacts, as well as the likelihood and magnitude of the risk posed to the property:
- 4. Research solutions to mitigate risk;
- 5. Provide recommendations that include a prioritization of strategies that are best suited to the property's unique characteristics;
- 6. Identify financing and incentives available to implement strategies;
- 7. Create an implementation plan that includes the timeline and management processes to achieve all strategies; and
- 8. Support implementation and evaluation to ensure strategies are implemented effectively and updated as new relevant information becomes available.

ABC received ten responses to the RFI from the firms included below. The text contains excerpts from the firms' submitted materials.

Firm(s)	Description (adapted from RFI)	Areas Supported
Arcadis	Arcadis is a global leader in resilience services. Through our experience in both the public and private sector, we have unique insight into how to evaluate climate risk and plan and design resilience building measures for many types of facilities. Arcadis has provided these services to a wide variety of asset managers, building owners, developers and investors in metropolitan cities throughout the US, including Boston, New York and Miami.	1-8





Arup	Arup is known as "the go-to firm for the most challenging and ambitious projects of our time". With an internal network of over 14,000 staff working in over 89 offices in 34 countries, we bring knowledge and experience of global best practices to our work in Massachusetts and worldwide. Arup offers a comprehensive suite of multidisciplinary engineering, planning, design, and consulting skills that allow us to deliver fully integrated projects that provide true value to our clients. This integrated and multidisciplinary approach and our firm's overarching commitment to shaping a better world provide a strong foundation for delivering comprehensive building scale resilience strategies.	1-8
C3 Boston	Commercial Construction Consulting (C3) is a multifaceted firm with a variety of services offered that include: MEP/FP Design Engineering and Commissioning; Construction Management; Construction Cost Estimating; Sustainability Consulting and LEED; Due Diligence Studies; Code Consulting; Energy Efficiency Feasibility Studies; and Real Estate Capital Planning/Consulting. The C3 motto is to approach our work with the "Owners mindset and the engineer's skillset". Each discipline is headed and staffed with personnel having 20 plus years of experience in their respective fields.	1-8
DNV GL	DNV GL has been serving buildings and facility owners for decades, providing planning and technical advice to support energy, climate and green building strategy development in the built environment. Our locally-based staff are dedicated to improving community sustainability and have closely followed all the related unfolding technology and policy development locally at both the city and state level.	1-8
Kleinfelder	Kleinfelder is a leading design, engineering, and environmental professional services firm, providing solutions to meet our world's most complex infrastructure challenges. Leveraging our integrated, cross-disciplinary team of professionals, we partner with public-sector clients to deliver leading-edge solutions on a variety of projects. Our reputation for expertise, innovation, and quality, earned since Kleinfelder's inception in 1961, has solidified our position as a trusted consultant and industry leader. Kleinfelder's award-winning Climate Change Practice helps clients understand and manage their risks from increased flooding, heat, and other climate hazards.	1-8





Linnean & Consigli	Linnean Solutions and Consigli Construction are pleased to team up as Linnean & Consigli to offer a full suite of resilience analysis, strategy development, and implementation services. Linnean has spent many years working with commercial, residential, and institutional clients to help them understand the climate related hazards facing their properties and to develop effective and cost-effective strategies to increase their property resilience. Consigli Construction brings years of experience cost estimating and implementing resilience upgrades in properties all over Boston and beyond. Together, this team can guide property owners to build value in otherwise vulnerable properties.	1-8
Michael Baker International	Michael Baker International, Inc. (Michael Baker), a leading provider of engineering, planning, and consulting services, has been partnering with communities since 1940 to solve their most complex infrastructure challenges with a legacy of expertise, experience, innovation and integrity. Supported by more than 3,400 employees in nearly 90 locations across the United States, we provide a full continuum of engineering, planning, and consulting services, including design, architectural, environmental, permitting, construction and program management. Our clients include a wide range of commercial clients, as well as municipal, state, and federal governments. Michael Baker is committed to delivering a standard of excellence that fosters a culture of innovation, collaboration and technological advancement to help solve our clients' complex challenges.	1-7
Perkins + Will	Perkins+Will's Boston studio is anchored in our ability to unite context with transformative design. We endeavor to create enduring environments that are innovative, sustainable, and flexible while honoring the cultural and physical context of our communities, campuses, and cities. Perkins + Will created the ReLi resilience standard and supported the design of Spalding Rehabilitation hospital locally.	1-8
Clarendon Hill Consulting/Linnean Solutions/re:ground LLC	Our team consists of three small business entities, Clarendon Hill Consulting, Linnean Solutions, and re:ground LLC who have worked together on similar resilience projects. Through our ongoing work with communities as Massachusetts Vulnerability Preparedness (MVP) program leaders, our team not only brings expertise in developing actionable resilience solutions and comprehensive implementation plans but is also able to point to the right financing solutions and incentives.  Clarendon Hill Consulting is experienced in risk and vulnerability analysis, deploying solid (GIS) modeling	1-8





tools, and the development of comprehensive resilience implementation strategies. Isabel Kaubisch, their Principal and Founder is an active member of the Energy Advisory Committee to the Massachusetts Board of Building Regulations and Standards (BBRS) and CREW Boston's Sustainability Working Group.

Linnean Solutions is a mission driven sustainable and resilience firm. They co-developed the report "Building Resilience in Boston" to advise the City of Boston on climate adaptation strategies which included the neighborhood level. Linnean is also experienced in resilience assessments for buildings and resilience audits, climate mitigation and adaptation planning, and with the development of resilience frameworks, manuals, and certification programs.

Re:ground LLC is led by Dave Hampton, whose experience includes the design, permitting, construction administration, and evaluation of scores of commercial, institutional, residential and other new, existing, and retrofitted buildings. He has worked in post-disaster response and recovery as well as in traditional U.S. markets. Dave is a thought leader in resiliency strategies, has contributed to Rockefeller Foundation's Rebuild by Design and the Boston Living with Water initiative, and cochairs the Boston Society of Architects Committee on Resilient Environments (CORE).

Members and commercial building owners and operators seeking to employ a third-party during resilience implementation may contact Yve Torrie at <a href="mailto:ytorrie@abettercity.org">ytorrie@abettercity.org</a> for more information on the resilience services provided by these firms.