SUSTAINABILITY ACTION PLAN

FRAMEWORK FOR THE FUTURE
2026



DIMELLA SHAFFER



Pan Athletic Center, Phillips Academy Andover, MA, 2022
LEED Silver | Daylighting and shading strategies. Indoor-outdoor connection.

table of contents

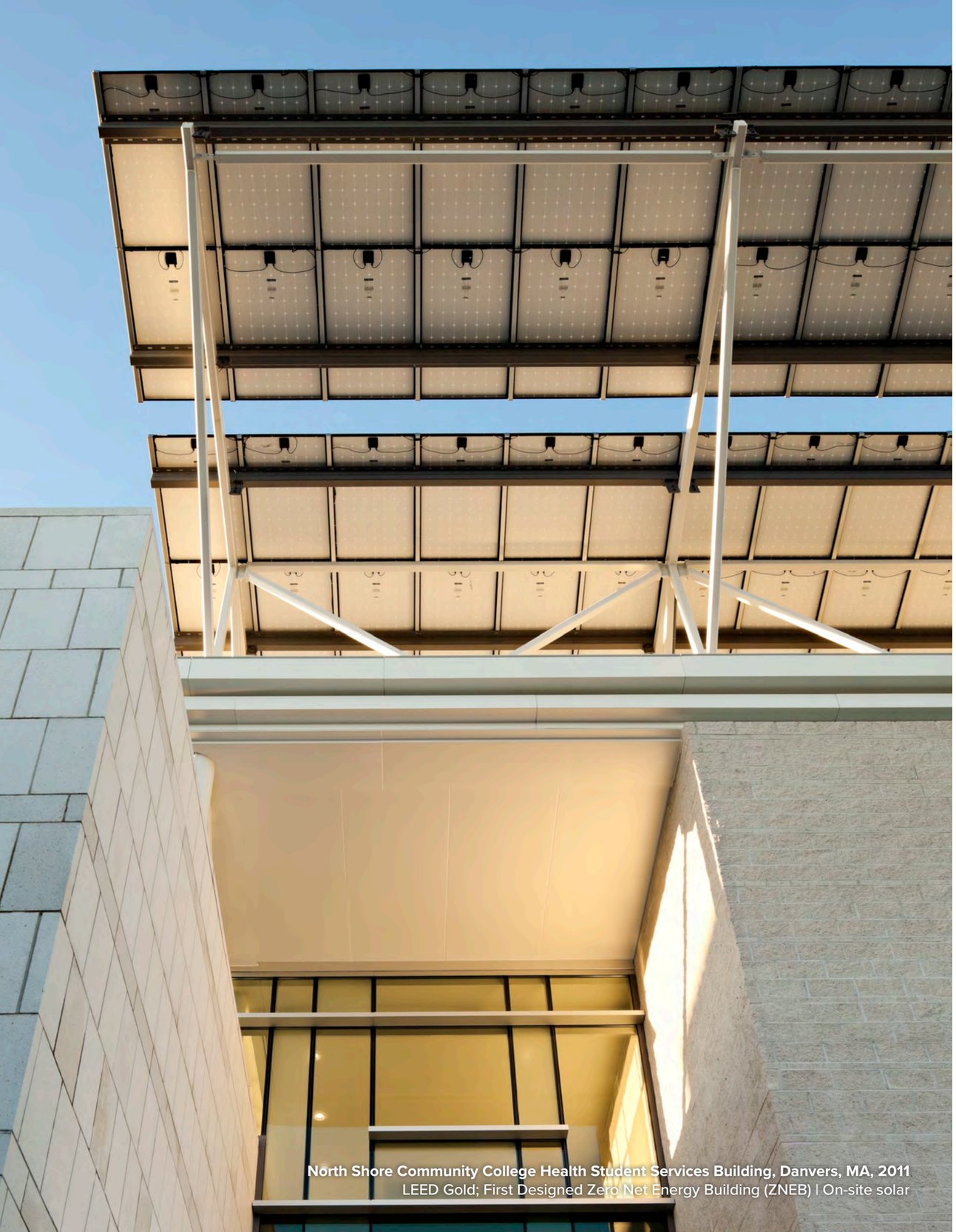
1 introduction

2 principles

3 case studies

4 research + development

5 steering committee



North Shore Community College Health Student Services Building, Danvers, MA, 2011
LEED Gold; First Designed Zero Net Energy Building (ZNEB) | On-site solar

values + vision

this plan reflects a simple belief: Good design must also be responsible design.

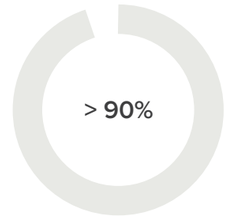
At DiMella Shaffer, ideas cross-pollinate across project types, disciplines, and communities, bringing diverse perspectives to the design process.

Founded in 1965, long before sustainability certifications and performance benchmarks became commonplace, DiMella Shaffer embraced principles that remain central to the firm today. Founding principal Rem Huygens applied passive design strategies that enhanced building performance and comfort.

From its early years, the firm was also an advocate for reclaiming underutilized sites, adapting existing buildings for new uses, and designing architecture that responds thoughtfully to the local context. Today, those same principles continue to inform our work.

Today, we build on that legacy through four interconnected priorities: **Place, People, Resources, and Future.** Together, these priorities help us create lasting value for our clients, communities, and the environment.

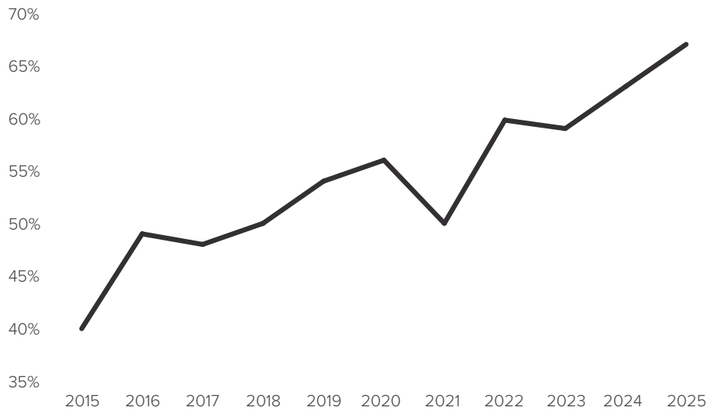
Through participation in the AIA 2030 Commitment and Materials Pledge, and by using the AIA Framework for Design Excellence, we measure, evaluate, and continuously improve our impact.



Net Zero Ready Projects
planned or under construction in 2025

“Sustainability isn’t separate from good design. The choices we make today shape how our buildings, communities, and environment endure.”

Lauren Günther,
Director of Sustainability



DiMella Shaffer Predicted Energy Use Intensity Reduction

firm timeline

past, present, and future

The principles that guide this plan are rooted in decades of design leadership, beginning with the firm's founding in 1965 and evolving through significant milestones in adaptive reuse, building performance, and industry leadership.







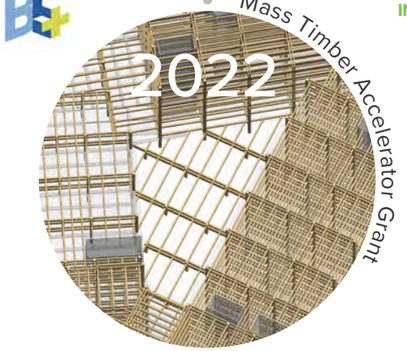


















Just.℠

Organization Name: DiMella Shaffer
Organization Type: Architecture
Headquarters: Boston, MA
Location(s) Covered: Boston, MA
Number of Employees: 58

SOCIAL JUSTICE & EQUITY INDICATORS

Diversity
- ■■■■ Racial & Ethnic Diversity
- ■■■□ Gender Diversity
- ■■■□ Recruitment

Health
- ■□□□ Physical Health + Safety
- ■□□□ Well-Being

Inclusion
- ■■■■ Belonging
- ■■■■ Accessibility
- ■■■■ Engagement
- ■■□□ Workforce Empowerment

Benefits
- ■■□□ Health Care
- ■□□□ Retirement
- ■■■□ Family/Medical Leave
- ■■□□ Professional Development

Compensation
- ■■□□ Living Wage
- ■■■■ Pay Scale Equity
- ■■■□ Racial & Ethnic Pay Equity
- ■■□□ Gender Pay Equity

Stewardship
- ■□□□ Community Connections
- ■■□□ Volunteering
- ■■■□ Charitable Giving
- ■□□□ Procurement

THE JUST LABEL 3.0

DSF-001
EXP. 10/01/2028

INTERNATIONAL **LIVING FUTURE** INSTITUTE℠

just label

commitment to equity, justice, and belonging

- New England AIA Emerging Professional Friendly Firm. 2018, 2020, 2021, 2022, 2024, 2025
- Winner of the Boston Women's Workforce Council's 2024 Wage Equity Impact Awards, celebrating our work in closing the gender and racial wage gap
- BBJ's LGBT Corporate Ally Award 2022
- State funded Workforce Training Grant
- Emerging Professionals Group
- ARE/AXP Success Group
- Employee Resource Groups

“ quote

TEXT UPDATE PENDING

”

Diana Linsenmayer
President | Principal



principles

Together, Place, People, Resources, and Future provide a framework for our approach to design. The actions outlined under each principle reflect approaches DiMella Shaffer commonly pursues in partnership with our clients. Their applicability varies based on project type, scope, budget, and client goals.

PLACE

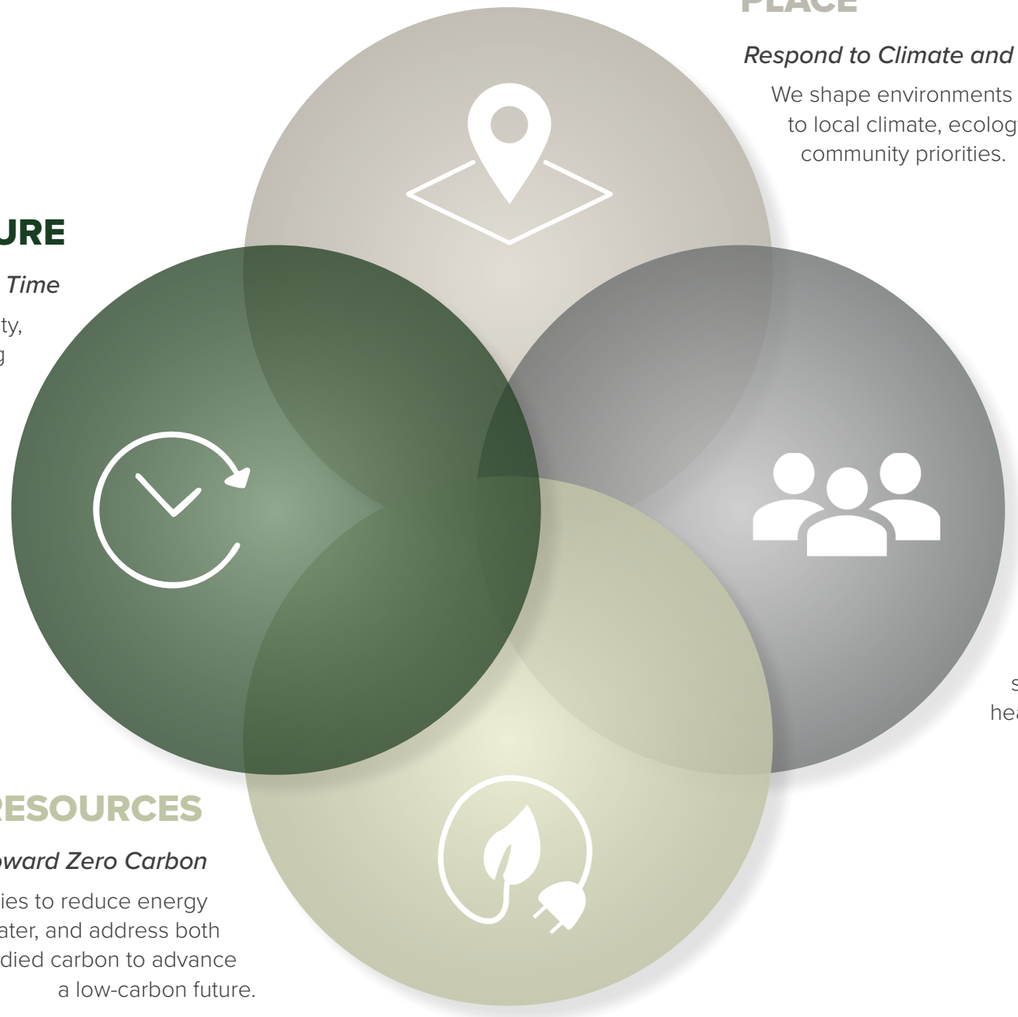
Respond to Climate and Context

We shape environments in response to local climate, ecology, and community priorities.

FUTURE

Design for Change Over Time

We design buildings to support longevity, resilience, and adaptation to changing needs and conditions.



PEOPLE

Center Inclusive Voices, Promote Health and Well-Being

Through inclusive engagement, we seek to create spaces that support health, comfort, and belonging.

RESOURCES

Advance Toward Zero Carbon

We prioritize strategies to reduce energy use, conserve water, and address both operational and embodied carbon to advance a low-carbon future.

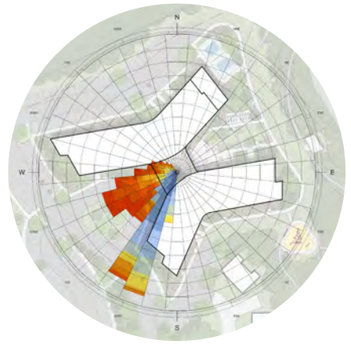
Fuse Apartments, Cambridge, MA, 2015
LEED Silver | Preserved visual connections to the Alewife Reservation

place

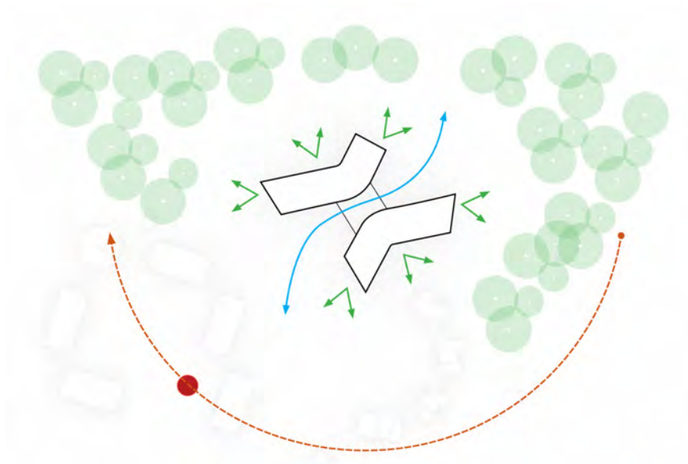
respond to climate and context

CLIMATE

- Evaluate site conditions, such as climate analysis, solar access, and wind patterns, to inform design decisions.
- Establish project sustainability goals considering adopted community plans and municipal and state climate objectives.
- Support the protection of wetlands and ecologically sensitive areas through thoughtful site planning and prioritizing previously developed sites.
- Promote access to daylight, quality views, and outdoor spaces.
- Collaborate with landscape architects and contractors to reduce site disturbance and support the preservation of open space and ecological function.



Summer Wind Analysis



Massing and Orientation Analysis



The Pryde, Hyde Park, MA, 2024
Fitwel | LGBTQ-friendly senior living community; Inclusive, accessible housing that promotes health and community connection

people

center inclusive voices, promote health and well-being

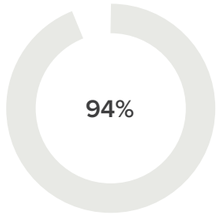
EQUITY

- Engage relevant stakeholders early, for example community members, users, and operations staff.
- Facilitate engagement sessions to understand user needs, accessibility priorities, and community goals.
- Document and consider input from relevant stakeholders at key project milestones.
- Explore partnerships with local organizations to broaden representation.
- Prioritize strategies that help reduce long-term utility costs.
- Integrate equity and occupant experience metrics into post-occupancy evaluation efforts where appropriate.

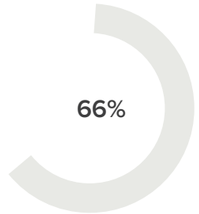
HEALTH

- Centralize materials with third-party transparency documentation in a shared internal database.
- Regularly update the DiMella Shaffer material library and specifications for healthy materials.
- Prioritize Red List Free and Cradle to Cradle certified materials, low- or no-VOC materials, and products with no added formaldehyde.
- Reduce the use of PVC and phthalates in specified materials.

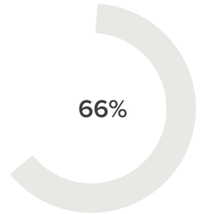
2025 AIA Materials Pledge Reporting - Interior Products for Three Projects



Products with sustainability documentation



Products with HPDs and/or Declare Labels



Products with low-emitting VOC certifications



UMass South College Academic Facility, Amherst, MA, 2016
LEED Gold | Renovation and addition to a historic academic building, preserving embodied carbon and extending building life

resources

advance toward zero carbon

OPERATIONAL CARBON

- Prioritize an envelope-first approach to reduce energy demand.
- Evaluate on-site solar and renewable electricity procurement.
- Support early energy modeling and, where appropriate, post-occupancy monitoring.
- Target lighting power density reductions of at least 40% below the AIA 2030 baseline.
- Advocate for enclosure and systems testing and commissioning to help verify performance.

2025-2030: > 90% of new construction and major renovations are all-electric and ultra-energy efficient.

2030-2035: 100% of new construction and major renovations are all-electric and ultra-energy efficient.

EMBODIED CARBON

- Prioritize building reuse, targeting retention of more than 50% of the existing structure and enclosure.
- Perform or support early life cycle assessment to inform design decisions and reduce project global warming potential (GWP).
- Specify products with environmental product declarations, responsibly sourced wood, and bio-based materials.
- Prioritize low-carbon structural systems, such as light-frame wood and mass timber.
- Target concrete with embodied carbon 20% below the NRMCA Eastern Region average and specify refrigerants with low GWP.
- Evaluate opportunities for material reuse and salvage to reduce waste.

WATER

- Target a 30% or greater reduction in potable water use through low-flow fixtures and efficient plumbing design.
- Reduce permanent irrigation through native and climate-adaptive planting.



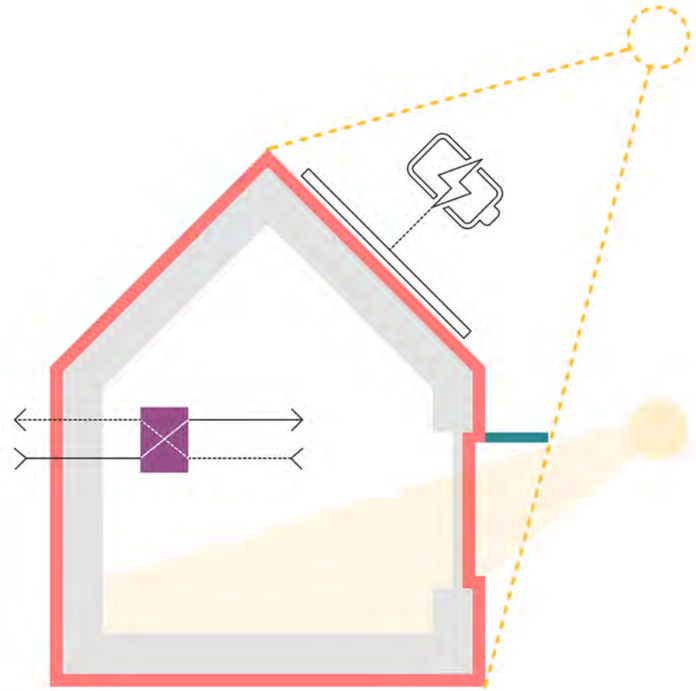
Marsh Hall, Salem, MA, 2010
LEED Gold | Bioswales, green roofs, and native plantings support stormwater management and site resilience

future

design for change over time

ADAPTATION

- Design enclosures that support passive survivability, helping extend habitable conditions during outages.
- Reduce heat island effects through strategies such as reflective roof surfaces, vegetation, and green roofs.
- Explore opportunities for resilience hubs or community spaces that can serve as cooling and warming centers during emergencies.
- Evaluate on-site solar-plus-battery storage.
- Support participation in demand response and grid flexibility programs.
- Collaborate with civil engineers on stormwater and flood resilience strategies to manage runoff.
- Prioritize the adaptation and reuse of existing buildings and infrastructure for future needs.



Passive survivability and battery back-up

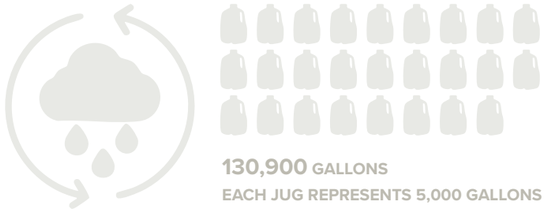
101 cambridgepark drive

case study 01

101 Cambridge Park Drive transforms a surface parking lot adjacent to the Alewife Transit Station into a life science development. Located within a flood-prone district, the project employs a layered flood resilience strategy that includes 17,500 cubic feet of stormwater storage beneath an elevated wood deck courtyard, capturing and slowly releasing runoff to reduce pressure on Alewife Brook during storm events.

Additional measures include a passive flood gate at the parking garage entrance and a first floor elevated 4.5 feet above street grade. Sloped walkways, ramps, and a terraced deck accommodate the elevation change while maintaining accessibility. Together, these strategies strengthen flood resilience while enhancing the user experience.

STORMWATER STORAGE



130,900 GALLONS

EACH JUG REPRESENTS 5,000 GALLONS

Public hearings and community outreach

First DiMella Shaffer Fitwel certification

Red List Free, Cradle to Cradle, HPDs, EPDs, and no/low VOC materials

Energy recovery ventilation

Stormwater storage and flood protection strategies

101 Cambridgepark Drive, Cambridge, MA, 2023
Fitwel, LEED Gold | Passive flood water storage below landscape, native plantings, and outdoor gathering spaces

blakeley hall

case study 02

Blakeley Hall demonstrates how existing buildings can contribute to a low-carbon future through strategic renovation rather than replacement. The revitalization of the 1926 residence hall maximizes building reuse while integrating continuous interior wall insulation, triple-glazed windows, and a super-insulated attic, along with energy recovery ventilation and low-temperature hot water designed for future electrification.

Together, these strategies reduce energy demand and improve thermal comfort while supporting the continued use of a legacy campus building.

- Addresses Tufts University's long-term campus decarbonization goals
- Red List Free, Cradle to Cradle, HPDs, EPDs, and no/low VOC materials
- Low-temperature hot water, all-electric hot water, and energy recovery ventilation
- Avoids new construction by increasing housing capacity from 85 to 120 beds
- Stormwater management



High-performance Envelope



Building Section

Blakeley Hall, Tufts University, Medford, MA, 2025
Historic Renovation | High-performance envelope upgrades, low-temperature hot water, and enhanced courtyard spaces

Blessed Sacrament, Jamaica Plain, MA, 2027
Pursuing LEED Gold Certifiable, Net Zero Ready | Adaptive reuse of a historic church into high-performance, all-electric affordable housing and community space

blessed sacrament

case study 03

Blessed Sacrament is a powerful example of how Boston can meet its climate goals while preserving history and strengthening community. The abandoned 1917 church, designated a Boston Landmark in 2022, is being transformed into 55 affordable multifamily units developed by Pennrose, and a performance center for Hyde Square Task Force.

The project reclaims one of New England's most significant churches as a climate-ready community asset. The elimination of fossil fuels within the building and the retention of the existing church highlights the team's commitment to minimizing environmental impact.

Designed to meet Boston Article 37 Climate Resiliency and 2023 Stretch Energy Code

High-performance enclosure, all-electric systems, and designed to achieve Net Zero Ready

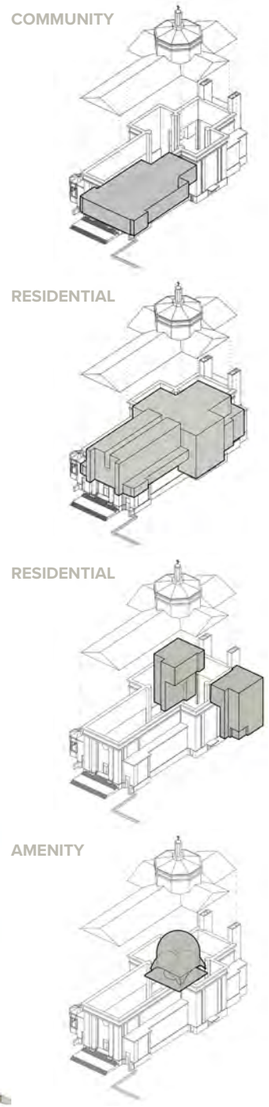
Renewable electricity for common spaces using Boston Community Choice Electricity

Cellulose insulation

Adaptation of a landmarked church into affordable housing and community space



Building Section



dimella shaffer office

case study 04

The DiMella Shaffer Office serves as a living laboratory for the sustainable design strategies the firm advances across its portfolio. Completed in 2020 within a historic Fort Point building, the 13,000 square foot LEED Gold certified renovation was shaped by staff input.

The office incorporates energy-efficient LED lighting with occupancy and daylight controls, Energy Star equipment, water-saving fixtures, healthy materials with transparent ingredients and environmental disclosures, and indoor air quality monitoring. Located within walking distance of public and regional transit networks, the office supports low-carbon commuting and demonstrates how thoughtful renovation can reduce the environmental impact.

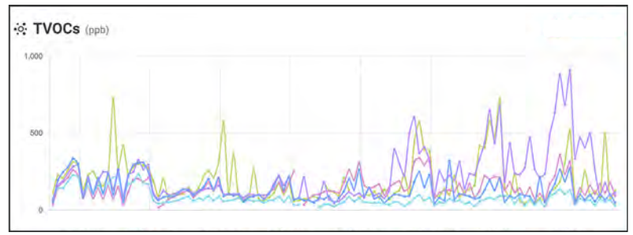
Employee feedback through pre- and post-occupancy surveys

Healthy material selection and indoor air quality monitoring

80% of the furniture reused from the former office

35% reduction in water use

40% reduction in lighting power density



Average VOCs: 159 ppb, healthy range

DiMella Shaffer Office, Boston, MA, 2020
LEED Gold | Healthy materials, indoor air quality, and employee engagement support occupant well-being and collaboration



Lasell Village, Newton, MA, 2027
Pursuing PHI, Net Zero Ready | Community-centered new gathering spaces, pedestrian connections, and adaptive reuse of historic Robin Dell House

lasell village

case study 05

The Lasell Village expansion demonstrates how resident engagement can shape more sustainable and resilient communities. Through five resident-led Programming and Design Groups, members helped guide decisions related to building performance, wellness, outdoor spaces, and connections to nature, ensuring the expansion reflects the values of the community it serves.

Designed to Passive House Institute (PHI) standards and aligned with Lasell Village's commitment to lifelong learning and environmental stewardship, the project creates a resident-informed model for low-carbon senior living designed to support aging in place and to strengthen connections across the campus.

- Responds to Newton's climate priorities, including the Fossil Fuel Free program
- Five resident-led Programming and Design Groups (PDGs)
- Designed to achieve Passive House (PHI) and Net Zero Ready, all-electric, on-site PV
- Whole building life cycle assessment (WBLCA) from project inception
- Red List Free, Cradle to Cradle, HPDs, EPDs, and no/low VOC materials
- Adaptive reuse of the historic Robin Dell House into senior housing

COMMUNITY ENGAGEMENT







SwitchPoint Quincy, Quincy, MA, 2027
Pursuing Phius, Net Zero Ready | High-performance envelope, on-site solar, and all-electric medical office building

switchpoint quincy

case study 06

SwitchPoint Quincy exemplifies the potential for healthcare facilities to reduce carbon emissions while creating a healthy indoor environment. The 110,000 SF ambulatory care center expands access to healthcare services in downtown Quincy and provides a new approach to healthcare design under the evolving Massachusetts energy codes.

As the first medical office building in the U.S. to achieve Design Certification under the Passive House Institute U.S. (Phius), the all-electric building combines a high-performance enclosure, energy recovery ventilation, and on-site solar generation to support reductions in energy demand and operational carbon.

Designed to meet Indoor airPLUS requirements

Designed to achieve Passive House (Phius) and Net Zero Ready, all-electric, on-site PV

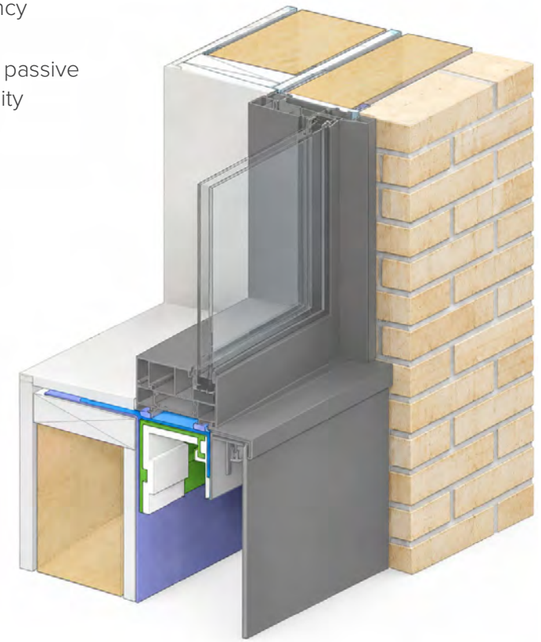
Reduced-carbon concrete with supplementary cementitious materials

Demand-controlled ventilation via smart dampers

Ventilation system redundancy

Supports passive survivability

87 kW



High-performance Envelope

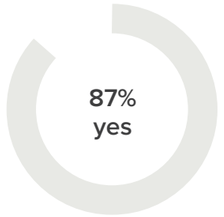
the pryde

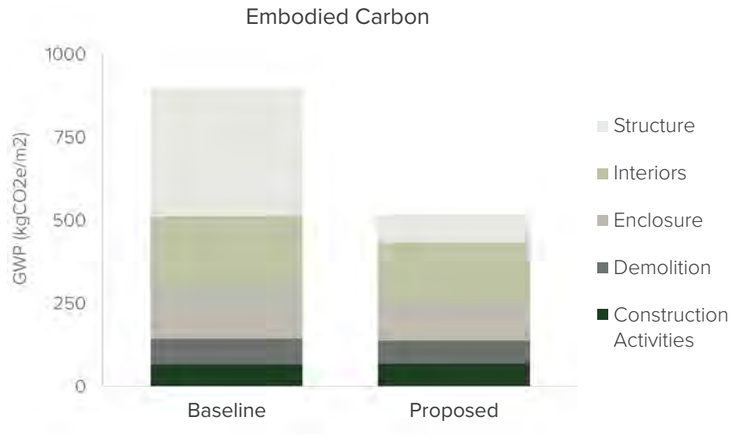
case study 07

The Pryde is Boston's first LGBTQ-friendly affordable senior housing development, setting a precedent for inclusive community development. Transforming the vacant historic William Barton Rogers Middle School into 74 affordable senior apartments, the project creates a supportive environment where residents can age with pride, dignity, and safety.

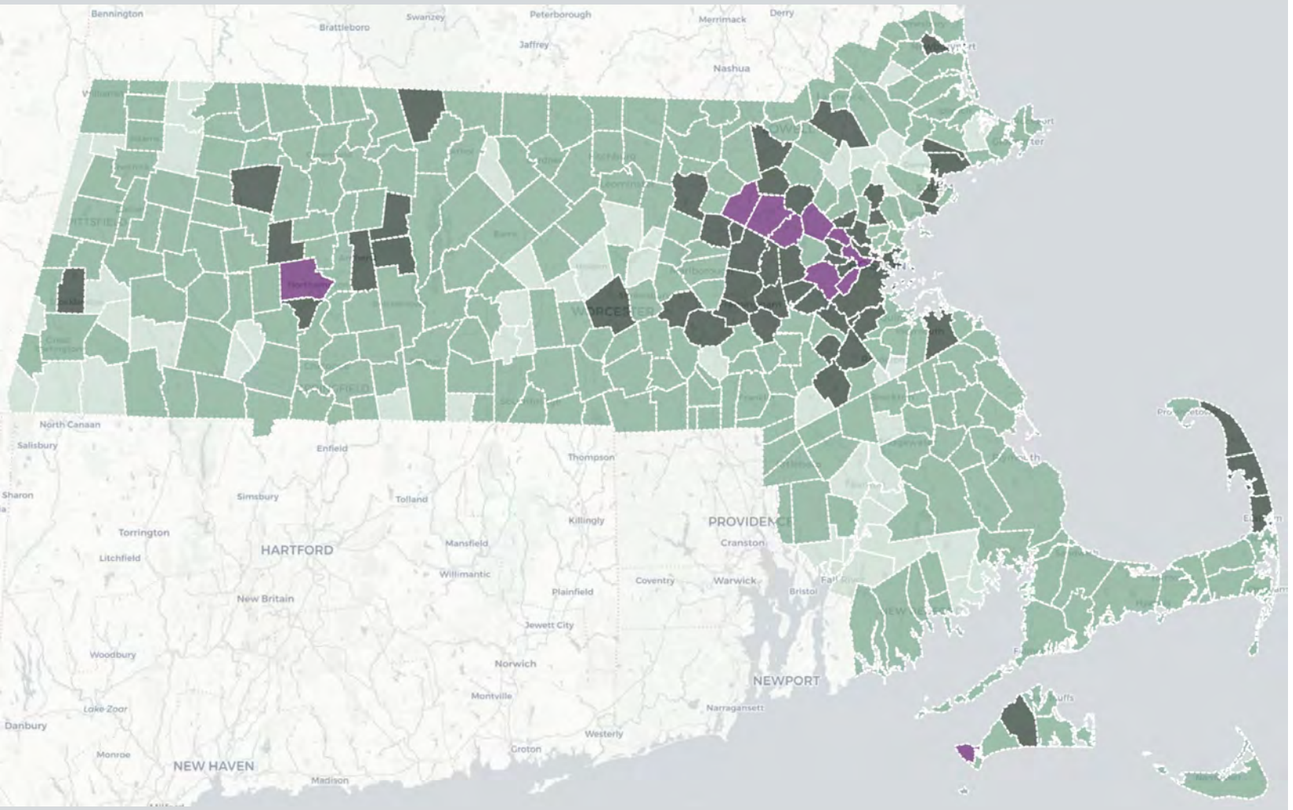
The Pryde achieved Fitwel certification and earned the Best in Building Health award in 2024. Recent post-occupancy evaluation findings further underscore its impact, suggesting that thoughtfully designed shared spaces and resident-centered amenities foster connection, support well-being, and reduce social isolation.

- Partnership with Pennrose and LGBTQ Senior Housing Inc.
- Multi-use community hub for intergenerational programming
- Measures equitable outcomes through post-occupancy evaluation
- Fitwel certification and Best in Building Health recognition
- Maximizes building reuse, all-electric and Net Zero Ready
- Adaptive reuse of historic William Barton Rogers Middle School into affordable senior housing





The Pryde, Hyde Park, MA, 2024
Fitwel | Adaptive reuse of a historic school into an inclusive LGBTQ-friendly senior living community



Massachusetts Energy Code Map

internal + external knowledge sharing

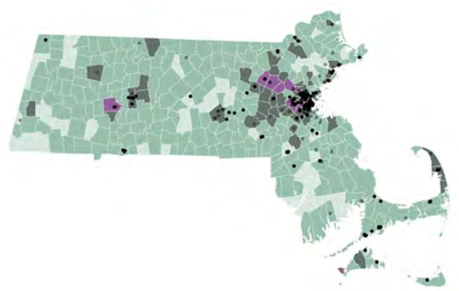
Advancing sustainable design relies on both building internal expertise at DiMella Shaffer and contributing to the broader design community. We invest in continuous learning, applied research, and open knowledge sharing to strengthen our practice and support industry-wide progress.

Internally, we connect technical rigor with project work through a culture of peer learning. Our in-house education platform, led by firm working groups including the Sustainability Working Group, provides regular sessions on high-performance building enclosures, healthy materials, documentation, and interdisciplinary coordination. These efforts reinforce a shared approach across our project teams.

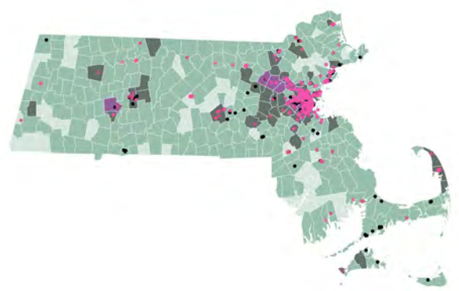
We also invest in training programs that expand technical capacity. Initiatives such as the Excelerator Workforce Training Grants, the Boston Mass Timber Grant, and the Massachusetts Clean Energy Center Internship Program foster mentorship and strengthen connections between academic and professional practice.

Externally, we share knowledge to advance a more informed and aligned industry. Since 2023, we have developed publicly accessible tools, such as the Massachusetts Energy Code Map, Decision Trees, and Sustainability Spotlights, to simplify complex requirements and enable clearer decision-making.

Our staff contribute regularly to regional and national conversations through speaking engagements, sharing lessons learned and technical insights. We also evaluate emerging tools, technologies, and delivery models to help clients make informed decisions. Areas of focus include district-scale geothermal systems, hot water systems, healthy and low-carbon materials, and expanding our post-occupancy evaluations. These efforts allow us to test ideas, measure outcomes, and translate research into practical design solutions.



Phius + PHI Design and Final Certified



Phius Registered

Blessed Sacrament, Jamaica Plain, MA, 2027
Pursuing LEED Gold Certifiable, Net Zero Ready | Existing church interior prior to its transformation into affordable housing and community space

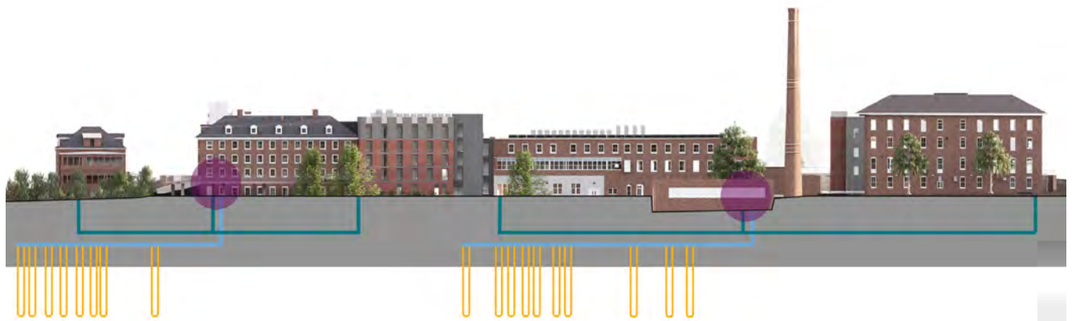
advocacy

We extend our impact beyond individual projects through targeted policy and industry engagement.

Our Director of Sustainability, Lauren Gunther, contributes to the Massachusetts Stretch Energy Code Technical Advisory Committee (SE-TAC), convened by the Massachusetts Department of Energy Resources (DOER). Through technical and regulatory discussions, the committee helps shape updates to the state's energy codes by bringing real-world project experience into the process.

As a Commissioner on the City of Somerville Climate Action Commission, Lauren also supports local climate initiatives and advocacy efforts that advance sustainability and resilience at the municipal level.

DiMella Shaffer champions higher-performing approaches to historic preservation, engaging with agencies to align historic standards with evolving energy code requirements. Drawing on lessons from building performance and post-occupancy evaluations, we help bridge the gap between preservation, policy, and long-term climate goals.



Historic Veterans Home at Chelsea District Geothermal

steering committee



LAUREN GUNTHER
AIA, CPHC, LEED AP, FITWEL



CHRISTYN MACDOUGALL
AIA, LEED AP, CPHC



ELIZABETH GRAY
ASSOCIATE AIA, LEED GA



PETER HELLER
AIA



DIKLA MILEGUIR
AIA, CPHC, NCARB



DOUG RAND
AIA, LEED AP, CPHC



TAYLOR WALKER
AIA, CPHC



FELIPE M. BARBIERI

This plan describes DiMella Shaffer's sustainability goals, priorities, and practices. The strategies described here may not be applicable to every project and are evaluated based on project scope, budget, schedule, client goals, regulatory requirements, and technical feasibility. This plan does not modify the scope of services, contractual obligations, or standard of care established under any client agreement. Project outcomes depend on numerous factors outside the firm's control, including owner decisions, permitting and regulatory approvals, construction means and methods, building operations, maintenance, and occupant behavior.

DIMELLA SHAFFER