

LACY SHELBY, PLA

Bronx, NY • (347) 266-4439 • lacys shelby@gmail.com • Licensed Landscape Architect (NJ) • Certified Ecologist • Doctoral Researcher, CUNY

PROFESSIONAL SUMMARY

Senior landscape architect and urban designer with 15+ years leading transformative public realm, green infrastructure, and coastal resilience programs across New York City and Minneapolis. A career built at the intersection of design excellence, systems intelligence, and public sector program leadership, from conceiving and launching NYC DOT's Green Infrastructure program (\$300M+ portfolio, 109 completed installations) to directing the \$2B+ post-Sandy coastal protection portfolio that became East Side Coastal Resiliency and FiDi Seaport Climate Resilience Plan. Experienced owner's representative who has managed and evaluated consulting firms from the client side, with a deep understanding of what design excellence, scope discipline, and cross-agency coordination require in practice. Doctoral researcher integrating terrestrial LiDAR, digital twin frameworks, and ecological sensing into applied resilience, bringing emerging technology fluency to design and thought leadership.

AREAS OF EXPERTISE

Public Realm & Urban Design • Landscape Architecture Practice Leadership • Business Development & Client Relationships • Coastal Resilience & Nature-Based Solutions • Green Infrastructure / Stormwater • Capital Program Management • Cross-Agency & Interdisciplinary Coordination • Design Standards & Policy Development • Staff Mentorship & Studio Culture • Emerging Technology Integration (LiDAR, IoT, Digital Twin, AI integration)

PROFESSIONAL EXPERIENCE

Deputy Director, Terminal Operations | Director, Climate Resiliency | Director, Green Infrastructure | Plaza Program Manager |
NYC Department of Transportation | 2009–2014 & 2017–Present

Four successive leadership roles spanning public realm design, green infrastructure program launch, coastal resilience, and critical infrastructure operations, building layered expertise across the full arc of public realm practice in NYC's complex regulatory and political environments.

Public Realm Design & Plaza Program

- Served as Plaza Program Manager and Lead Project Planner for NYC DOT's PlaNYC Plaza Program, managing capital project initiation and design procurement for 17 plaza projects totaling \$90M+ in construction value, including Times Square Reconstruction and Astor/Cooper Square.
- Authored conceptual site plans, design themes, and design guidelines establishing site-specific character, material palettes, curb geometry, street furniture placement, planting design, and construction cost methodology for each project.
- Navigated projects through Landmarks Preservation Commission and Design Commission reviews, DDC technical review, utility coordination, and OMB Capital Project Initiation approval processes.
- Facilitated interdisciplinary design charrettes coordinating DOT, DDC, consultant teams, Business Improvement Districts, and community organizations; applied Project for Public Spaces placemaking methodologies.

Green Infrastructure Program Launch & Direction

- Established and directed NYC DOT's Green Infrastructure program from the ground up, a \$300M+ capital portfolio integrating nature-based stormwater solutions across all five boroughs under NYS DEC Consent Order compliance, delivering 109 completed right-of-way bioswales and establishing an 18,000+ installation pipeline.
- Developed construction specifications and standard details for bioswale cross-sections, infiltration basins, permeable pavement assemblies, and curb cut overflow configurations; authored Street Design Manual chapters codifying resilient landscape typologies citywide.
- Executed hydrological engineering methodology (DEP tributary drainage approach) that reduced agency dependence on external review and accelerated project delivery; secured \$10.15M+ in competitive grant funding including a \$1.2M Green Innovation Grant.
- Negotiated complex MOUs between DOT, DEP, and Parks establishing durable maintenance and jurisdictional frameworks for GI citywide; coordinated peer city knowledge exchanges positioning NYC as an international model for urban ecological design.
- Recognized by the National Audubon Society at the 9th Annual Women in Conservation Luncheon (2012) as one of the 'Women Greening the City.'

Coastal Resilience & Climate Adaptation

- Directed program coordination for NYC's \$2B+ post-Sandy coastal protection portfolio, overseeing 8 major initiatives from inception through design development, including the \$1.45B East Side Coastal Resiliency project (2.4 miles of Manhattan waterfront, 110,000 residents) and the FiDi/Seaport Coastal Resilience Master Plan.

- Led Resiliency Planning and Management team of 4 core staff while coordinating technical work across 50+ DOT professionals and 150+ external professionals including HDR, ARUP, AKRF, Arcadis, and 6 partner agencies (DDC, EDC, Parks, DEP, MOCEJ, NYCEM).
- Provided design review and technical coordination ensuring landscape-based coastal edge solutions met flood protection performance requirements while advancing ecological restoration, waterfront access, and public realm quality.
- Participated in Commissioner-level strategy sessions developing DOT's Resiliency Blueprint submitted to the Mayor's Office; presented directly to federal SIRR partners on climate adaptation strategy.

Critical Infrastructure & Asset Management

- As Deputy Director of Terminal Operations, serves as strategic advisor and asset manager for the Staten Island Ferry, one of NYC's most critical transit facilities, overseeing \$31.5M in facilities operations contracts across HVAC, fire suppression, elevators, building envelope, and site drainage.
- Serves as strategic advisor and program manager for \$45M FTA-funded coastal flood protection Design-Build program at the Ferry, coordinating environmental compliance, engineering, security, legal, grants, and operations.

Principal Urban Designer | *City of Minneapolis, Community Planning & Economic Development* | 2014–2016

Led urban design strategy and capital project oversight for Minneapolis, shaping public realm policy and stewarding \$87M+ in high-profile projects through design coordination and stakeholder engagement.

- Co-chaired the Urban Design Task Force for Minneapolis 2040 Comprehensive Plan; drafted policy frameworks for Climate Resilient Communities and Public Realm targeting 80% GHG emissions reduction by 2050.
- Stewarded \$37M+ capital portfolio including Hennepin/Lyndale Reconstruction (\$15M); The Commons at US Bank Stadium (\$22M, 4.2 acres, Hargreaves Associates); and W. 29th Street, Minneapolis's first shared street.
- Authored, and led graphic development of the Downtown Public Realm Framework Plan, the city's guiding policy for streets, open spaces, and the downtown riverfront, produced in partnership with the Minneapolis Park and Recreation Board.
- Conceptualized, designed, and launched the City of Minneapolis Parklet Program (2014), developing complete design standards, application procedures, permit processes, and the Parklet Design Manual. Awarded the Innovative Transportation Solutions Award, Minnesota Chapter of the Women's Transportation Seminar.
- Invited speaker at national conferences including NACTO and SxSW on public realm design and placemaking; member of the Natural Capital Project on the Urban InVEST initiative; invited speaker at the international Natural Capital Symposium; peer-reviewed publication in *Frontiers in Psychology* (2019) on ecosystem services in urban infrastructure.

Landscape Architectural Designer | *LHB, Inc.* | 2016–2017

- Preliminary through final design for public realm projects; key work included City of Grand Rapids Outdoor Performance Venue Feasibility Study, City of Saint Paul Green Infrastructure Capacity Study, and Lincoln Park Restoration.
- Developed policy frameworks and diagrams communicating cross-agency GI delivery mechanisms including public-private partnerships, overlay districts, and environmental impact bonds for St. Paul.

Designer | *Michael Van Valkenburgh Associates* | 2008–2009

- Contributed to Vassar College Landscape Master Plan: tree canopy mapping (200+ species), circulation and stormwater analysis, GIS analysis, and integrated ecological and infrastructure planning drawing on Olmsted-era archival research.

DOCTORAL RESEARCH, EARTH & ENVIRONMENTAL SCIENCES, THE GRADUATE CENTER, CUNY (EXPECTED 2027)

Research integrating terrestrial LiDAR, IoT environmental sensor networks, and digital twin frameworks for ecological systems analysis and predictive modeling, with direct application to resilient infrastructure design, ecosystem services valuation, and technology integration in landscape practice. Contributes to emerging thought leadership in AI-assisted ecological analysis and data-informed public realm decision-making.

EDUCATION

Doctoral Researcher, Earth & Environmental Sciences | The Graduate Center, CUNY | Expected 2027

Master of Landscape Architecture | Cornell University

B.A.S., Recreation and Outdoor Education | University of Minnesota

LICENSES, CREDENTIALS & AFFILIATIONS

Licensed Landscape Architect (NJ) • Certified Ecologist • LEED Green Associate (GBCI) • Member, ASLA (AI Working Group)