PROFESSIONAL BIOGRAPHY

Thomas J. Hahn, Jr. :: AIA, CPHC, LFA, MArch

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Tom is a Registered Architect (AZ) and a former Licensed Contractor (AZ), and has an extensive teaching background at several architecture and design schools and programs. He holds a Masters of Architecture degree with emphasis in Energy-Conscious Design from Arizona State University, and a Bachelor of Arts in Architecture from the University of Washington. He is now an Associate Teaching Professor at the University of Oregon's School of Architecture and Environment. Prior to that, he was the Associate Director and one of the core faculty of the Ecosa Institute for Ecological Design, as well as Faculty in Sustainability at the Frank Lloyd Wright School of Architecture, both in Arizona. During much of that time, he was also the Director of Design, and a Senior Architect, at Ecosa Design Studio :: Architecture + Planning, until its closing in 2012 as a result of the recession. With over 35 years of experience in environmental, architectural design, construction, and teaching, he is recognized for his extensive knowledge and abilities in designing and building projects with synergies of the holistically environmental, elegantly experiential, constructably economical, and sensitively ethnological, using cutting-edge resource-efficient building materials and systems. Most recently, he was a co-author of the 4th edition of The Green Studio Handbook, the internationally recognized book on design processes, strategies and case studies for inclusion of environmentally-conscious design at the earliest stages of design process.

His design, consulting and teaching work of the past two decades has been in pursuit of an architecture where each project's sustainability and expression are uniquely rooted in its place, people, program and production. Through exploring this, he has been developing a design methodology he terms "ecological morphogenesis", which he has used in creating innovative, award-winning, ecologically- and experientially-sensitive solutions. This conceptual and graphic process evolves the form of a built environment – whether a building, site, landscape, neighborhood, or interior – directly from thoughtfully distilled constituent forces or impulses of the project's complete environs – both natural and human – and is aimed at deriving "an elegant solution to a complex set of challenges in a specific ecology". On the technical side, he has experience in the full range of passive and active strategies for energy-, water-, and materials-efficiency, including experience with bio-climatic design, solar-electric and thermal, wind systems, gray/rainwater harvesting, xeriscaping and permaculture. In addition, he has experience with natural building systems such as earth and straw, and other more technical alternative systems such as insulated concrete forms (ICF's), structural insulated panels (SIP's), composite EPS foam structures, and shipping containers, with the full-range of recycled/recyclable materials, and resource-efficient finishes.

His most recent architectural project was the custom Gifford-Anderson residence, that used a highly energy-efficient insulated block system, OmniBlock, for a sensitive desert wash site. Ecosa Institute projects included the Antelope Hills Corridor Natural Conservation Proposal and the Sixth Street Neighborhood-Living City:2035 Proposal. Major Ecosa Design projects included the Jones-Glotfelty Shipping-Container Home, Mission Lane Multi-family Housing project, and the Pine Forest Waldorf School campus. Previously, Tom led Sol Source Architecture, of Phoenix, AZ, after founding it in 1994 as one of Arizona's first exclusively ecologically-conscious architectural practices. Significant Sol Source projects included the Desert Marigold Straw-bale Classroom Building, the all-structural-composite-foam Wise Residence, and the ICF-built award-winning Ballogg Residence. Significant consulting roles included the Foothills Academy straw-bale campus and the Phoenix Zoo's rammed earth Arabian Oryx/ Bighorn Sheep trail and exhibits. From 2001 to 2005, he led his construction firm, Three Rivers EcoBuilders, in constructing some of the most innovative alternative building-method projects in Arizona, including the world's first "composite stressed-skin/all-foam" house, Strata's Hidden Hills House.

From 1997 to 2005 he taught in Arizona State University's Schools of Architecture and of Landscape Architecture, leading both graduate and undergraduate design studios and design/build classes, and courses on environmental design theory and construction materials/methods. During that time, his research focused on the early aspects of ecological morphogenesis, while he also served as the Director of the renowned ASU (formerly APS) Environmental Showcase Home, for the ASU College of Architecture and Environmental Design. Earlier, in the late 1990's, Tom helped start the City of Scottsdale's Green Building Program, and was the Managing Editor of *The Last Straw*, the quarterly international journal of straw-bale and other natural building methods, while teaching natural building workshops throughout Arizona. He began his environmental design career working under the nationally-acclaimed architect Eddie Jones, and Jones Studio, in Phoenix, AZ. There, Tom was a noted Project Architect serving a significant role in the conception, design, development, and project administration of many of the firms best known, multi-award winning projects, including the APS Environmental Showcase Home, and the Black Canyon Equestrian Trailhead.

CURRICULUM VITAE

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EDUCATION

Master of Architecture (in Energy-Conscious Design), Arizona State University, Tempe, Arizona 1988
Bachelor of Arts (in Architecture), University of Washington, Seattle, Washington 1986

REGISTRATIONS/CERTIFICATIONS/MEMBERSHIPS

Registered Architect: Arizona #25640
American Institute of Architects #40907909
Certified Passive House Consultant (CPHC): #3123
Living Futures Associate (LFA): Spring, 2023
International Living Futures Institute (ILFI), Member, 2018-
Society Building Science Educators (SBSE), Member, 2019-
Licensed Contractor: Arizona Residential #B-164655 (inactive); Arizona Small-Comm'l #B2-170375 (inactive)
Green Building: Founding Advisory Comm, City of Scottsdale Green Building Program
Green Building: Charter Member, Global Straw-bale Building Network

PROFESSIONAL POSITIONS

Assoc. Teaching Professor; University of Oregon, Eugene, Oregon, since 2015

Teaching both undergraduate and graduate level, required and elective design studios, as well as core courses in Building Construction and Environmental Controls Systems, and elective in Natural Building Systems. Emphasis is on concepts and strategies of sustainable and regenerative design, with particular focus on ecological site inventory and analysis, and comprehensive, holistic, experiential and ecological design of building and site, while also applying ecological thinking to selection, integration and synergies between various ecological building concepts, strategies, systems, and materials, from site to details.

Associate Director/Core Faculty; Ecosa Institute for Ecological Design, Prescott, AZ; 2008–2014

One of the core faculty at, and assisted in directing this innovative environmental design education program involving both hands-on and conceptual design work with environmentally-responsible building systems and ideas, for real-world clients, on urban infill to neighborhood to rural scale, land-planning, architectural and design/build projects.

Faculty in Sustainability; Frank Lloyd Wright School of Architecture, Scottsdale, AZ; 2011–2014

Faculty lead in curriculum content on sustainability, developing and leading courses on issues, concerns and concepts of sustainable and regenerative design, as well as methods of applying that knowledge to selection, integration and synergies between various ecological building systems, products and materials. Also lead mentor to students on their required design studio projects.

Director of Design/Senior Architect; Ecosa Design Studio, PLLC, Prescott, AZ; 2008–2012

Principal designer and environmental consultant for this architecture firm specializing in holistic, synergistic, experiential architectural solutions of site, client, climate, budget, maximizing resource- & energy-efficient design.

President and Principal Architect; Sol Source Architecture, Inc., Phoenix, AZ; 1994–2007

Founder, principal designer and environmental consultant for this architecture firm which focused its body of work exclusively on resource- and energy-efficient design, evolved uniquely to each ecology of place and people.

President, Licensed Contractor, & Builder; Three Rivers EcoBuilders, Inc, Phoenix, AZ; 2001–2005

Licensed, qualifying party, head of construction operations, and on-site hands-on lead builder for this Phoenix-area building firm specializing exclusively in environmentally-responsible constructions, one of the first such firms in the state of Arizona.

Asst. Professor/Adj. Faculty; Arizona State Univ., School of Architecture; Tempe, AZ; 1997–2005
Teaching materials and methods of construction and design studio to undergraduate and graduate students. Also, acting as an advisor for architecture and design graduate-degree candidates focusing their theses on sustainable design. Director of the ASU Foundation Environmental Showcase Home, 2001-2002. Assistant Professor 1998-2002, Adjunct Faculty 1997-98 and 2002-2005.

Managing Editor; The Last Straw Journal; Tucson, AZ; 1996–1998
Head of editorial and writing staff, as well as layout director and manager of day-to-day operations, of this international journal of straw-bale and natural building techniques. Author of occasional feature pieces and reviews of significant publications.

Project Architect, Project Manager; Jones Studio, Inc., Phoenix, AZ; 1990–1994
Led significant, award-winning projects from the design development, technical production and consultant coordination perspective, as well as collaborating with the principals of the firm on the design of projects in the conceptual phase and beyond. Managed architectural and master-planning projects from programming through construction administration.

Intern-Architect, Job Captain; James Abell & Associates, Inc., Tempe, AZ; 1988–1990
Firm's principal was licensed both as an Architect and a Landscape Architect, doing small to medium landscape/hardscape projects, and architecture projects, for corporations, institutions and residential clients. Worked with "xeriscaping", using native plants, and ultra-low water-use irrigation.

TEACHING (selected)

School of Architecture & Environment, University of Oregon, Eugene, Oregon

Environmental Control Systems I, Winter, 2019–2026. co-taught with Alison Kwok, Siobhan Rockcastle
Required core lecture/lab covering environmental issues around energy consumption, basic thermodynamics, passive and active concepts, strategies and systems for thermal comfort, solar geometry and shading, and vertical transportation, as well as alternative comfort technologies.

Building Construction, Fall, 2018–2025
Required core lecture/lab covering conventional architectural materials and building systems, and concepts of regulatory issues, financial/costing issues, environmental responsibility, resource-efficiency, and opportunities for alternative building technologies.

Natural Building Systems and Materials, Spring, 2020, 2022, 2023, 2025
Elective, advanced-technical course, in lecture/lab format, covering "natural" building materials and building systems, such as straw-bale, earth-buildings, bamboo and hemp construction, covering regulatory issues, financial/costing issues, environmental responsibility, resource-efficiency, and design, detailing and construction with those materials and systems.

Introductory Design Studios, Fall 2019, Winter, 2016, Spring, 2015-19, & 2024-25, & Summer 2024-25
These required core studios explored program, tectonics, and site conditions response as primary determinants of architectural form, with a basis in understanding the emergent response of form and site to the ecology of a given place. Projects have included a community boathouse and rowing center, a central library for a small town, a branch library for a city, an urban environmental design research and education facility, and a sustainable urban-buildings research & education center.

Intermediate Design Studios, Fall, 2015–2018, 2021-2025, Winter 2018, 2019, 2021, 2023; Summer, 2015–2018, 2020-2023
These elective combined undergraduate/graduate studios explored several ways of understanding architectural siting, form and systems emerging specifically from a constituent ecology, either urban or rural, as defined by its environmental, economical, experiential and ethnological aspects. Process involved deep ecological inventory, site and program analysis, emergent design process, design analysis and assessment calculations for energy, water and materials, and both digital and hand presentations. Projects have included a micro-farming agricultural marketplace and processing facility, an urban cycling community center, a wetlands education center, an urban sustainability school, a coastal ecology research station, and a mass-transit-oriented mixed-use neighborhood hub.

Advanced Architectural (Comprehensive) Design Studio, Winter/Spring 2020, 2022, 2023

This is the "capstone" studio sequence for the UO's graduate and undergraduate professional degrees, and is required for graduation. It is a rigorous two-term studio, exploring a design topic with a supporting large-scale project, from its most theoretical and conceptual underpinnings, through schematic design and into design development. The project culminates in project with significant development as to the structural, construction and enclosure systems and materials, the active and passive human comfort strategies, systems and distribution, water and renewable energy systems, and compliance with key building code and accessibility issues, as well as construction costs.

Ecosa Institute of Ecological Design, Prescott, Arizona

Environmental Design Studios, 2008–2014

"Design studio" portion of the highly integrated Ecosa semester program. Projects were "real-world" based, with extensive interaction with participatory clients, for a wide variety of locations, from the desert Southwest to international locations in Africa and Central America, striving for regenerative synergies between community and environment. Programs had a broad range of scale, from school campuses, to sustainable neighborhood redevelopment, to streetscape revitalization, and affordable housing. Scope ranged from conceptual designs and design guidelines to design development documentation, with some students continuing as part of on-site development of the projects.

"Environmental Construction Techniques and Technologies";

Series of lectures and seminar discussions beginning with an overview of building science and how architectural materials and building systems must respond to those "forces of nature", with special emphasis on specific concerns of environmental efficiency and responsibility, as well as economics. Followed by an expansive overview of a full-range of low-tech and natural building systems, and interior and exterior finishes, and a parallel exploration of high-tech and manufactured alternative building systems, and exterior and interior finishes, with comparative discussions of benefits and challenges in responding to those forces and concerns.

"**Site Assessment and Analysis"; Ecosa Institute of Ecological Design; Prescott, AZ; 2010-2014**

Course content included a series of on-site explorations, lectures, and in studio individual and group work to learn how to assess, document, analyze and engage with the full-range of ecological "impulses" extant in a place, its surroundings and its region, in the process of evolving a regenerative design for a built environment at that place.

Design/Build Workshops; 2004-2008.

Led several week-long to month-long iterations of this workshop exploring the potential for natural and low-tech materials in not only creating more sustainable buildings, but also experientially rich small-scale architecture. Based around hands-on construction work in the field, supported by lectures, seminar discussions and field trips to exemplary natural building projects.

Frank Lloyd Wright School of Architecture, Scottsdale, Arizona

"Box Project" Mentor Design Studio, Graduate & Undergraduate 2012–13

Served as a one of three "mentors" selected to each advise a group of three students – one undergraduate, two graduate – on their winter-season long design projects at Taliesin (known there as "Box Projects"). Having all been students of mine in the Sustainability courses there, the projects generally had some environmentally-conscious or sociologically-responsible aspect. Projects included a rural/suburban wildland-fire station with firefighter housing, an elder-assisted living center, and a local tribe's native-language research/learning center.

"Principles of Sustainability" 2011-14

Class introduced concepts that underpin design of sustainable built environments, global and local issues surrounding resource consumption, ways to analyze the resources and sinks available to a project , study how solutions in nature evolve in response to their own resources and sinks, and conclude with an exploration of how these understandings can be employed, through a variety of design methods to shape built environments.

"Applied Sustainability" 2012-14

Class followed the introduction of Principles of Sustainability, to introduce a wide range of techniques, systems, products and materials that might be used in developing projects designed for sustainability. This covered passive and active energy and human comfort systems, water resource efficiency and reuse, construction systems and materials alternatives for exterior and interior applications, and indoor environmental and air quality issues. This content was then incorporated into students' studio projects.

School of Architecture, Arizona State University; Tempe, Arizona

"**Architecture of Environmentally-Responsible Building"; Spring, 2001**

Seminar class on the theory and practice of environmentally-responsible design and building, with a particular emphasis on the intersection and synergies of ecological-design strategies, technologies and materials with more traditional, formal architectural methodologies and expression. It asked the question of how architectural form and experience can marry with, or be derived from environmental responsiveness, as understood from philosophical analysis, issues discovery, precedent study and design guideline development.

ASU Integral Studio: Environmentally-conscious Production Housing; Fall, 1999.

Was selected to lead the inaugural Integral Studio at ASU, a new studio format designed to bring together the various design disciplines within the College of Design, and be a collaborative research effort between the lead teacher and the students. This studio focused on the barriers and opportunities to environmentally-responsible building in the mass-production housing markets. As part of the process brought together leaders in government, finance, design, construction and real estate for input and review. Work by the students of this studio was presented at the 2001 ASES national conference and won a prestigious ValleyForward Crescordia Award in 2001.

Design/Build Workshop; 1998-2001.

This elective workshop class explores the connections between design and building both in theory and practice through a series of projects that tie in with hands-on construction work in the field, all interwoven with the concepts of resource-efficiency and environmental responsibility.

Construction Materials and Methods; 1997-2001.

Required core lecture/lab covered conventional architectural materials and building systems, and concepts of resource-efficiency, environmental responsibility, and opportunities for alternative building technologies.

Undergraduate Design Studios; Spring, 1997 & 1998, Spring & Fall, 1999-2002.

These required core studios explored program, tectonics, and site conditions response as primary determinants of architectural form, with a basis in understanding nature's solutions in a given place as a starting point. Projects included a municipal desert park visitor's center and trail systems, an ethnic community's meeting hall/memorial park/cemetery, an interstate-freeway welcome center and rest stop, and a national forest information center and rangers' headquarters.

Graduate Design Studio; Fall, 1998.

This required graduate studio focused on urban context, complex programmatic aspects, and a deeper understanding of "resources" as it applies to community, as primary determinants of architectural form, with an emphasis on strategies for gathering direct community and client input prior to, during, and after design. Projects were all based in a distressed deeply-ethnic community in the Phoenix-metro urban fabric, and included a minor project of a "day-worker" labor meeting point and shelter, and a major project of a new design for a new Town Hall governmental and community center, with emphasis on sensitivity to the surrounding climate and ecology.

Graduate Thesis Chair or Committee Member; 1997-2002.

Acted in a range of advisory roles for graduate students in the Masters of Architecture programs, with 4 years as Chair of one or two students theses each academic year (1999-2002). Projects generally had some environmental-conscious or socio-economically-responsible primary focus (quite radical and innovative at the time at ASU). Project typologies ranged from mixed-use high-rise housing and commercial, educational institutions, sports venues, and nature/recreational facilities.

Independent Study or Terminal Project Advisor; 1995-2005.

Acted as an advisor to a variety of undergraduate and graduate students in the architecture, landscape architecture and interiors programs, on a variety of types of explorations, from building and interior designs, to green-building rating system analysis/development, to building system construction details and thermal analysis

SERVICE (selected)

School of Architecture & Environment, University of Oregon, Eugene, Oregon

Department of Architecture Curriculum Committee, since AY 2021–22

Member of departmental committee focused on developing and managing the curriculum in the graduate and undergraduate programs in architecture. Specific roles include sub-group focused on integration of technical content in design studios and across the curriculum, and development of guidelines for documenting and evaluating comprehensive architectural knowledge in terminal projects studios.

Department of Architecture Undergraduate Studies Committee, since AY 2021–22

Member of departmental committee focused on oversight of undergraduate programs and student experience and performance in architecture. Specific roles include leading revisions and enhancements to guidelines for evaluating design studio performance at all levels, collaborating on undergraduate program procedures, and reviewing student work as needed in gate reviews.

Department of Architecture Graduate Admissions, AY 2022–23

Member of departmental committee reviewing applications for incoming students to the Master of Architecture programs for AY 2023-24.

Department of Architecture Undergraduate Admissions, since AY 2021–22

Member of departmental committee reviewing applications for incoming students to the Bachelor of Architecture programs for AY 2022-23.

Department of Architecture Other Service, various periods since AY 2017–18

Participant in ad hoc groups on topical or logistical issues, including co-leading one supporting and assisting architectural faculty with implementation and management of remote teaching structures, techniques, and tools at the start of the pandemic, and participation in one focused on technical content integration into studio curriculum. Participation in faculty retreats and program/curriculum visioning sessions.

PRESENTATIONS (selected)

"Renewable Fuel for Studio: Inside The Green Studio Handbook, University of Oregon, Eugene, AZ; April, 2026

Presentation about the new The Green Studio Handbook's 4th Edition, co-authored Tom Hahn, Alison Kwok and Walter Grondzik. Covered the history of the editions, the impetus for the 4th edition, and the structure and contents of the new edition, along with samples of some of the new content, and how it would be useful in both education and in professional practice.

"Emerging Efficiency: Systems Design in Synergy with Architectural Expression"; ASHRAE Student Chapter, University of Oregon, Eugene, AZ; April, 2017

Presentation on using emergent design processes, and systems thinking to synergies the design of passive and active thermal comfort, sun control, and daylighting systems with experiential aspects of architectural form, and the economical aspects of building construction technologies and materials.

"Emulative Ecological Design"; Prescott College, Prescott, AZ; October, 2012

Presentation on the environmental, economic, architecturally experiential and ethical issues and design impulses related to ecologically-responsible building, ways to respond to them, exemplary building designs, and a design methodology that emulates nature in striving to balance the responses to the "environment, economy, experience and ethics" in the built environment.

"Build Well – Forefront of Green Materials and Research"; January, 2010
One of the organizers of, and one of the speakers giving the daily introductory breakfast talk, at conference exploring the latest research, testing and technology for environmentally responsible and sustainable building materials and systems. Leaders in research, testing, teaching and design sharing their work in a collaborative, environment.

"Conspiring With Nature: A Design Methodology Based In Ecological Awareness"; August, 2003
EcoWave Conference - San Francisco Institute of Architecture; Berkeley, California. Discussion of the environmental, economic, architecturally experiential and ethical issues related to environmentally-responsible building, ways to respond to them, and exemplary building designs, and proposed design methodology that emulates nature to create synergies of "environment, economy, experience and ethics" in the built environment.

"The Tale of Two Schools - Straw-bale in the Fast-track and All-volunteer Realms"; August, 2003
EcoWave Conference - San Francisco Institute of Architecture; Berkeley, California;. Comparative discussion of the advantages and disadvantages, opportunities and challenges of designing and building two schools using straw-bale construction techniques - one as a community design/build process, the other as a conventional design and construction project, but done on a "fast-track" schedule.

"Toward Environmentally Responsible Production Housing"; Washington, DC; May, 2001
American Solar Energy Society "Solar2001" National Conference, Washington, DC. Presentation about the academic research work of the first-ever Integral Studio at ASU's School of Architecture on the potential for environmentally-sensitive and cost-effective designs for mass-market production housing.

***"*From The Inside Out: Creating Architecture Within The Community Realm"; February, 2001**
Abstract of paper accepted for presentation at and proceedings of the International Conference on Humane Habitat; Rizvi College of Architecture, Mumbai, India; February, 2001. Issues and strategies for designing for expression and sustainability at all levels in community-based design projects.

***Green Building Advisor* Invited Outside Reviewer; 1999**
Asked to serve as an outside reviewer by creator of nationally-recognized and award-winning Green Building Advisor software and resource database, *architect Gail Lindsey, to review the updated version of the Advisor software for content, structure, and ease of user interface.*

"Employing Environmental Awareness Toward A Design Methodology"; October, 2000
Proceedings of the ACSA West Regional Conference; Arizona State University, Tempe, AZ;. Academic paper and conference presentation covering research into the environmental issues and ethics of the built environment, and how that can inform the development a design methodology for integrative ecological design. Included precedent as well as examples from my own design work.

"Alternative Building Systems and Materials Seminar"; October, 2000
National Association of Housing Rehabilitation Officials (NAHRO) National Conference; Phoenix, Arizona;. Presenter and moderator of four-person panel showcasing wide range of alternative and environmental building technologies - all-natural to high-tech.

"Natural & Low-Tech Environmentally-Responsible Design and Building"; March, 2000
Arizona State University School of Architecture's "EdgeOfGreen" Lecture Series. Three-day workshop on environmental issues and ethics, design strategies, building systems and detailing related to environmentally-responsible building, followed by half-day hands-on workshop with natural building materials.

ArCon: "The Guggenheim in Bilbao"; Arizona State University, School of Architecture; April, 1999
Student organized, faculty discussion forum on the implications to society, local and global, of this project in Spain. Among the panel of four faculty, I focused on the trade-off between resource and economic cost versus societal improvement if done in every similar-sized city, long-term socio-

economic opportunities missed versus short-term tourism gains in Bilbao, and whether other alternatives, funded as well as the construction of the museum, might not have more lasting and socially supportive benefits.

Introduction to Straw-bale Construction; Maricopa Association of Governments (MAG) Building Codes Committee Meeting; Phoenix, AZ; December, 1998

Presentation of the issues around straw-bale construction from the building code perspective, with back-drop of the environmental and societal benefits. In support of their deliberations on adopting straw-bale building codes.

Benefits and Challenges of Straw-bale Construction; Tempe City Council; Tempe, AZ; Nov., 1998

Presentation of the history and methods of straw-bale construction, with back drop of the environmental and societal benefits. In support of the City of Tempe city council's deliberations on adopting straw-bale construction into the City's building code.

"The Case for Simple Building" lecture; Energy & Climate Seminar, Arizona State University, School of Architecture; Tempe, Arizona; November, 1998

Theoretical & pragmatic discussion of implications of technological building solutions to environmental challenges.

"The State of Green Building in Arizona", Arizona Planning Association State Conference; Phoenix, Arizona; October, 1998

Presentation of the issues of environmental building and the state of the local shift to environmental building.

"Sustainable Building?"; Arizona State University; Tempe, Arizona; March, 1998

Public presentation in support of my application for a tenure-track teaching appointment, outlining my overall philosophy toward environmental building based in the environmental concerns known then, and describing the design methodology I had developed as a response to those issues, as demonstrated by examples from my work.

Building the Guadalupe Straw-bale Demonstration Home; International Straw-Bale Conference; Kingston, New Mexico, October, 1997

Presentation of the process and design of the Guadalupe Demonstration Straw-bale Home.

Industrial Technology Educators Association (ITEA) National Conference; Phoenix, AZ; April 1996

Presentation on the opportunities for education about industrial technology with regard to the issues around environmentally-responsible design.

Recycling: Building Sustainable Economic Growth Conference; Reno, NV; Oct., 1995.

Session lecture and presentation of the issues and lessons discovered during the development of the APS Environmental Showcase Home project

HOPES Conference; University of Oregon, Eugene, OR; April, 1995

Session lecture and presentation of the issues and lessons discovered during the development of the APS Environmental Showcase Home project.

APS Environmental Showcase Home; Abilene Christian University, February, 1995

Invited by Interior Design program at ACU to do a guest lecture and presentation about the issues and lessons for environmental design discovered during the development of the APS Environmental Showcase Home project.

APS Environmental Showcase Home; Arizona Planning Association Annual State Conference, Phoenix, Arizona; October, 1994

Session lecture and presentation of the issues and lessons discovered during the development of the APS Environmental Showcase Home project.

PROFESSIONAL WORK (selected)

Gifford-Anderson Residence; Cave Creek, Arizona; 2021.

Formally concise, and economical architectural form arising in sloping desert site crossed by arroyos, designed specifically to maximize experiential view qualities, as well as solar- and natural ventilation-responsive building forms. Designed to be built with a high-performance insulated concrete masonry construction and to employ a host of passive and active energy-, water-efficiency strategies, systems.

Dishal Residence (project); Prescott, Arizona; 2012.

Highly expressive but very economical architectural form arising from steep hillside unique site, rainwater harvesting roofs and site design, and solar- and natural ventilation-responsive building forms. Designed to be built with an insulated poured-earth construction. Will employ whole host of passive and active energy-, water-efficiency strategies and systems.

Jones-Glotfelty Shipping-Container Residence; Flagstaff, Arizona; 2011.

Two-story residential design using shipping containers for major architectural and structural elements on very tight urban infill site. Innovative construction detailing for container connections to manage cold, snowy climate. Employs passive solar heating and natural ventilation cooling design, solar assisted radiant floor heating, heat-pump water heaters, soy-based polyurethane insulation, non-toxic finishes and cabinetry, stained concrete floors and high-performance glass.

Raudzens Residence (project); Phoenix, Arizona; 2009.

Highly expressive architectural form arising from unique site, rainwater harvesting roofs and site design, and solar- and natural ventilation-responsive building forms. Designed to be built with an innovative "seamless" rammed-earth construction. Will employ whole host of passive and active energy-, water-efficiency strategies and systems, including an innovative integrated building-site rainwater capture and reuse systems.

DeHaen-Devich Residence; Fountain Hills, Arizona; 2008

Extremely site responsive and reduced grading design on a unique ridge/valley site. Constructed with super-insulated but conventional construction for energy-efficiency with economy. Will also employ hyper-efficient heating and cooling systems, heat-pump water heaters, recycled cellulose and soy-based polyurethane insulation, non-toxic finishes and cabinetry, stained concrete floors and high-performance glass.

"Just Breathe" Yoga Studio Eco-Renovation; Phoenix, Arizona; 2007

Mid-scale commercial eco-renovation. Extensive aesthetic and resource-efficiency upgrades to 1980's commercial building in Phoenix urban core. Included calming spatial reconfiguration and finish selection, upgrade of cooling systems and lighting systems, improved daylighting, and environmental interior materials and finishes. Highly coordinated with City and neighborhood for rapid approval and implementation.

McDowell Studios: "Offices at 1619" Eco-Renovation; Phoenix, Arizona; 2006

Mid-scale commercial eco-renovation, one of the first in Phoenix. Provided marketable functional, aesthetic and resource-efficiency upgrades to 1950's streetscape building in gentrifying major urban street. Included spatial reconfiguration, plumbing additions/upgrades, exposing and improving aesthetics of underlying structure, upgrade of cooling systems, improved daylighting, and environmental interior materials and finishes. Interaction with City as part of their hopes for this project to spur further improvements in the urban quality along its street.

Wise Residence; Payson, Arizona; 2006

Innovative structure of stressed-skin polystyrene construction technique (second project in the world for this system) for walls and roofs. designed to be owner-built in a heavily forested lot. Uses a wide varied of passive and active energy-, water- and materials efficient approaches, while being designed to fit into a very modest budget. Employs graywater and rainwater collection, daylighting, photovoltaic system, cotton insulation, and very efficient mechanical systems.

Roebuck Straw-bale Residence; Apache Junction, Arizona; 2005

Architect and builder of one of the first code-permitted heavy-steel framed non-load-bearing straw-bale buildings in Arizona, designed by Sol Source and built by Three Rivers EcoBuilders on a very modest budget. Employs rainwater collection, natural daylighting and ventilation, recycled metal roofing, stained concrete floors, recycled cellulose insulation, and very efficient mechanical systems.

Strata Alternative Building System (SABS) Demonstration Spec-Home; Scottsdale, Arizona; 2005.

Construction Project Manager and foam-erecting sub-contractor of first-in-the-world use of cutting edge cementitious-stressed-skin polystyrene-foam structural building system technology, as well as a hyper-efficient heating and cooling system, and high-performance glass. A "spec-residence" sold at a 15% premium over exact-same floor-plans done from wood-frame, but 50% smaller cooling system due to the super-insulated envelope.

Lofts on East Osborn (project); Phoenix, Arizona; 2005

Design of 5-unit environmentally-responsible and economically efficient multi-family residential complex, utilizing cutting edge stressed-skin foam structural building system technology, as well as a whole host of other energy-, water-, and materials-efficiency measures. Designed to be sold at a profit on the "spec-loft" market burgeoning at the time in the Phoenix area.

Sanders Eco-Renovation; Phoenix, Arizona; 2004

Architect and builder of the high-profile resource- efficient remodel and addition in Phoenix-metro area. Provided much needed functional, aesthetic and energy- and resource-efficiency upgrade to 1950's ranch-style residence. Included use of SIP structural wall system, retrofit of energy-efficient windows, upgrade/reconfigure cooling systems, improved daylighting, and improved indoor/outdoor spatial relationships.

Curry Residence (project); Phoenix, Arizona; 2004

Rapid construction project using SIP's (Structural Insulating Panels) designed for an urban infill lot. Extensive passive daylighting and ventilation, to employ "universal design" and low toxin finishes in very modest budget.

Ballogg Residence; Yavapai County, Arizona; 2003

Architect and builder of multi-award-winning home for limited budget retired couple on view-limited, highway exposed low-desert site, alongside a large wash. To be built from insulated concrete forms (ICF's), it gathers outdoor space to link with indoors and uses natural ventilation, daylighting, and efficient construction.

Casa Aquila Compound (project); Aquarius Mountains, Mojave County, AZ; 2002

Design and construction of completely off-the-grid conference retreat/dwelling, using on-site earth for stabilized earthen walls, recycled steel roof structure, photovoltaic or fuel-cell energy systems, non-toxic finish materials, gray-water and rainwater harvesting, minimized site/slope disturbance, passive solar and ventilation strategies, high-performance glazing and evaporative cooling and radiant heating.

Harvard House (project); Phoenix, Arizona; 2001

First building-code-permitted load-bearing straw-bale residential building in the City of Phoenix, to be built for and sold on the "spec" home market, in central Phoenix. Designed to also employ graywater and rainwater collection, daylighting, photovoltaic system, cotton insulation, and very efficient mechanical systems.

Atkin Residence (project); Fallon, Nevada; 1998

Earth-embraced, super-energy-efficient residence using foam-form (ICF) concrete wall system and a variety of resource-efficient materials and strategies. House overcomes unfortunate solar orientation (driven by view to pond on site) by reaching up and back over the sand dunes behind the house to capture sun with south and southwest facing clerestories and full-height glass in cool Fallon climate.

Danielsen Environmental Remodel; Phoenix, Arizona; 1998

Resource- efficient remodel and addition including energy-efficiency upgrades. Provided much needed functional, aesthetic and resource-efficiency upgrade to 1950's ranch-style residence. Included retrofit of energy-efficient windows, upgrade and reconfiguration of cooling systems, improved daylighting, and improved indoor/outdoor spatial relationships. Considered to be one of the first consciously "environmental" remodels in central Arizona.

PUBLIC/COMMUNITY DESIGN, PLANNING & PROGRAMS (selected)

Yarnell Hill Fire & Wildland Firefighter Memorial Park (project); Yarnell, Arizona; 2014

One of three designers selected to develop conceptual designs for a memorial for the 19 firefighters killed in the 2013 Yarnell Hill wildland fire, and for the residents who lost their homes in the fire, in 2013. Concept uses a solar clock in creating a spatial homage to the moment of the tragedy, while making for a community-use space that evokes the "fire", the "protectors" and the "people", as a monument for all wildland firefighters and their heroic commitment to others, with long-term potential to evolve in its civic function.

Sedona Environmental Living, Learning and Design Center Campus (project); Sedona, AZ; 2013

Collaborative environmental design on facilities for a new post-secondary environmental-design education program, to be sited on 7 acres in sensitive environment near the "red rocks" outside of Sedona. To be off water and power grids, and built in phases with hands-on participation from future students, with various natural building technologies, incorporating permaculture and restoration ecology strategies, with rainwater capture and wetland wastewater treatment. Since project intended to go into construction quickly, role went beyond studio leader, as design collaborator with Tony Brown, of Ecosa, with students in supporting roles.

Antelope Hills Highway-Bypass Natural Conservation Proposal (project); Prescott, AZ; 2012

Collaborative environmental design Arizona Department of Transportation and Yavapai County on analysis of existing topographical, hydrological, botanical and zoological conditions in area of planned new highway corridor across high-desert grassland antelope habitat, followed by design for mitigation strategies not only for the roadway, but also future housing development, including maintaining wildlife corridors while maintaining existing drainage patterns and enhancing future vegetation to offset lost land to housing.

Reviewer, "Straw-bale Construction" Appendix to IGCC and IBC; 2011-2012

Asked by writers of a proposed section in the International Green Construction Code (IGCC), on straw-bale construction, to consult on and be a reviewers of the content for applicability, accuracy and compliance, and to write a letter regarding my professional opinion to the International Code Council for inclusion in the review process. This section, with some additional modifications, was later proposed for inclusion in full International Building Code, and I provided an updated review and letter.

Miller Creek Watershed Revitalization Proposal (project); Prescott, AZ; 2011

Collaborative environmental design led by Ecosa, in conjunction with many different stakeholders including City of Prescott, Arizona Dept. of Environmental Quality, Yavapai County, Prescott Creeks, and others, for analysis of the current conditions of the very urbanized Miller Creek watershed in Prescott, and then developing water quality and wildlife corridor improvement, and native vegetation re-establishment strategies for the watershed, along with outreach strategies to encourage local residents and business owners to support the proposals.

Living City-2035 - 6th Street Neighborhood Revitalization (project); Prescott, AZ; 2010

Collaborative environmental design, working with City of Prescott Council-member, on proposal for urban design, infrastructure and policy guidelines for the revitalization and transformation of former light industrial portion of central Prescott into new mixed-use community and retail/commercial zone. Explored benefits and challenges of a mid-size, multi-purpose stadium as part of the mix, ultimately deciding it was not a long-term advantage for the neighborhood or city. Ultimately expanded for submittal as part of the Living City 2035 competition.

Mixed-Use Retail/Educational/Residential Complex (project); Prescott, AZ; 2010

Collaborative environmental design on mixed-use facilities on urban infill site near flood-prone environmentally-sensitive perennial creek. Designed for reduced energy consumption while remaining quickly and economically constructable, and adaptable to future changes in commercial real estate conditions. Explored synergies between programs for retail grocery store, "farmer's market" stalls, educational space for Prescott College, and housing for students, while encouraging street revitalization and respecting creek and flood-plain. Developed in interactive process with stakeholders from commercial side as well as city.

Pine Forest School Campus Master-plan & Conceptual Designs (project); Flagstaff, Arizona; 2009

Master-plan developed through highly-interactive process with community - faculty, staff, students and parents over several sessions, establishing community consensus goals and program. This was then envisioned on a very site sensitive design on a heavily forested and sloped site, utilizing high-performance panelized wall system. To employ integrated passive and active solar strategies with high-performance daylighting design, hyper-efficient heating and cooling systems, non-toxic finishes and cabinetry, stained concrete floors and high-performance glass. Site design will integrate rainwater and graywater reuse, and explore wetlands wastewater treatment, in conjunction with permaculture-based educational agriculture and biome remediation.

Courtyard At Mission Lane Affordable Multi-Family Housing (project); Phoenix, Arizona; 2009

Project Architect during Design Development and Construction Documents for multi-story, 42-unit affordable-condominium project on tight urban site, in neighborhood rehabilitation zone near north-Phoenix hospital, to be LEED-certified under LEED-H protocols (estimated LEED Platinum). Designed for maximum environmental response and architectural experiential qualities with minimum material use, environmental impact and energy consumption. To be constructed with high-performance insulated CMU and SIP walls, engineered wood, recycled steel, highly-efficient heating and cooling systems, non-toxic finishes and cabinetry, and high-performance glass. Site design utilizes rainwater harvesting and LID runoff design, and permaculture/xeriscaped landscape design.

City of Scottsdale Green Building Program; Scottsdale, Arizona; 2004-1997

Outside environmental consultant and, later, Advisory Committee Member, for ground-breaking environmental-building evaluation program for residential construction, developed by City of Scottsdale, on all aspects of resource-efficient design: energy, materials, water, IAQ and solid waste.

Desert Marigold School Masterplan & Straw-bale Classroom Building; Phoenix, AZ; 2002-1998

Master-planning through community design process of 5-acre campus, schematic design and head of all-volunteer construction of four-classroom, straw-bale school building for this non-profit private school. As the first code-permitted straw-bale building in the City of Phoenix, and first straw-bale school building in Arizona, required highly-interactive process with City for design and approval. Won a 1999 Citation Award from the national American Institute of Architects' Committee on Architecture and Education. (Design Development and Construction Documents in collaboration with Blossom Design Group, Tempe, Arizona, as Architect-of-Record)

"**Appropriate Building Systems Research" – Hopi New Town Grant; ASU; Tempe, AZ; 2000 - 2001**

Research under $10,000 grant toward understanding building systems, technologies, products, and materials appropriate for demonstration housing program on the Hopi native-American Reservation. Exploratory work to pursue additional funding for construction of first homes. Co-principal with Vidar Lerum, Leslie Van Duzer and Principal Investigator Ignacio San Martin.

Wilson Neighborhood Revitalization Charrette; Phoenix, AZ; 2000

Invited member of charrette design team assembled by Arizona State University's Joint Urban Design Studio. Groups of local professionals in design gathered with representatives of neighborhood organizations to explore the potential for the planned Phoenix light-rail system on an older neighborhood in central of Phoenix, Arizona, and ways to use support from the City of Phoenix to help make the community prosper and be more sustainable.

Balsz/Gateway Neighborhood Revitalization Charrette; Phoenix, AZ; 1999

Invited member of charrette design team assembled by Arizona State University's Joint Urban Design Studio. Groups of local professionals in design gathered with representatives of neighborhood organizations to propose a mixed-use design for large parcel of land in an older neighborhood in central Phoenix, AZ, to make it sustainable.

Eco-Smart Residential Environmental-Rating Program Consultant, Tempe, AZ; 1995

Consulting work for Eco-Group, Inc., Tempe, AZ, on the development of the Good Cents Environmental program model into a nation-wide applicable rating system called Eco-Smart. Involved analysis and scoring of various elements of environmental design, including energy-, water-, and materials-efficiency, as well as indoor air quality and solid waste issues, against a matrix of environmental impact factors including resource-depletion, pollution creation, and human health impact.

APS Environmental Showcase Home; Phoenix, Arizona; 1994; (while with Jones Studio)

Project Architect, design collaborator with Design Principal Eddie Jones, and a primary technical consultant responsible for researching and coordinating the use of the environmental-building strategies, systems, products and materials in this nationally acclaimed resource- and energy-efficient demonstration residential project, one of the first projects of its kind in the country.

Town of Paradise Valley Site Master-plan, Paradise Valley, AZ; **1993, (while with Jones Studio)**

While working for Jones Studio, Tom Hahn was the Project Manager in charge of master-planning of the entire Town government complex, including the Police HQ, the Town Hall, Public Works, parking, storage yards, and was in charge of leading the programming efforts for a 16,000 s.f., $2.5 million facility with a complex mixture of community and judicial functions. He then collaborated on the schematic design of the building in collaboration with Design Architect Eddie Jones, resolving the multi-valent functions into a coherent, aesthetic whole, that maintained the Town's image and the budget. Building construction documents and construction phase were completed by another Valley firm, but value-engineering was done before hand-over of design.

Good Cents Environmental-Rating Program Consultant, Tempe, AZ; 1993

Consulting work for Eco-Group, Inc. of Tempe, AZ, on the development of the Good Cents Environmental Residential Construction rating system. Involved analysis and scoring of various elements of environmental design, including energy-, water-, and materials-efficiency, and indoor air quality and solid waste issues, against a matrix of environmental impact factors including resource-depletion, pollution creation, and health impact.

Parker Strip Recreational Masterplan and Visitor's Center; Parker/Lake Havasu, AZ 1993

Project Architect on the development of a master-plan for 12 miles of recreational facilities along the Colorado River, and the programming and schematic design of those facilities. These facilities included wayside points-of-interest signage, interpretive trail systems, camping and day-use facilities, and two separate visitor's centers at each end of the route.

Black Canyon Trailhead Facilities; Maricopa County, AZ; 1992 (while with Jones Studio)

Project Architect and co-designer with Design Principal Eddie Jones on this extremely resource-efficient, visitor- and desert-durable facility independent of electric, water and sewer grids using photovoltaics, composting toilets, natural ventilation and no-maintenance exterior finishes. One of the first "environmental" projects in Arizona, and winner of multiple local, regional and national design awards, as well.

Homolovi Ruins State Park – Infrastructure/Campground/Restrooms; Winslow, AZ; 1990-91 (while with Jones Studio)

Project Architect on the latter stages of development and implementation of a master-plan for an entirely new Arizona State Park focused on Native American ruins in the area. This included all park utility infrastructure and roads, a complete campground facility and restrooms, and a Visitor's Center and interpretive trails and signage.

ASU Student Services Courtyard; Tempe, Arizona; 1989. (while with Abell & Assoc.)

Design collaborator with principal James Abell on design of geometrically rich hardscape and structured landscape designed to provide color all year-long, while denoting seasonal changes for students along highly trafficked axis connecting the center of campus to newly built Student Services Building.

Phoenix Zoo Desert Habitat Master Plan (project); Phoenix, AZ; 1989 (while with Abell & Assoc.)

Design collaborator with principal James Abell on design and Project Manager of this master plan and design guidelines for the planned Desert Habitat, which would include animals from great deserts around the world.

Environmentally-Sensitive Wildlife Refuge Visitor's Center (project); Tule Lake, CA; 1988

Master's Degree Graduate Thesis project, working with the US Fish & Wildlife Service, in exploring the interaction of passive and active solar energy systems with the architecture of a new visitor's center for the Tule Lake Wildlife Refuge. Form of the building expresses educational opportunities in viewing wildlife and learning about the wildlife refuge management system, but also provides an armature for collecting and storing solar thermal energy. Building zoning allow its occupancy to expand and contract based on season, staffing and visitor volume

WRITING, RESEARCH & EXHIBITIONS

Emerging Beauty: Built Form Arising From Ecological Impulses **(in development); since 2010**

Research and draft sections for series of publications or book describing design methodology in development called "ecological morphogenesis". Explores basis, potential and techniques for design of built environments directly and intrinsically and synergistically from the ecological impulses – both "natural" and "human" – inherent in a place, ones that must also be resolved for true sustainability and regenerative capability. The basis of this approach is emulation of the emergent" design process" of seen in flora, fauna, pre-industrial peoples and even contemporary precedent.

National Tour of Solar Homes-Jones-Glotfelty Container House; Flagstaff, AZ Oct 2009

Our shipping-container designed house included in Flagstaff portion of the National Tour of Solar Homes, emphasizing its resource-efficiency, passive solar design, innovative high-performance insulation strategies, and environmentally-conscious materials selection, and low-water use and rainwater reuse landscape design.

"LEED-ing Away From Sustainability"; *Sustainability Journal*; Summer, 2008

Peer-reviewed article in Sustainability: The Journal of Record, Issue 1:3, *addressing the intrinsic challenges and counter-purpose results created by typical "green-building" rating and certification programs as they become more commonplace around the US, with propositions for an alternative set of more holistic performance criteria.*

"Unintended Consequences: LEED-ing Away From Sustainability"; October, 2006

Invited to be included in exhibition at Arizona State University's College of Design on unintended consequences of building codes, regulations and standards. Tom's "LEED-ing Away…" paper and poster addressed the intrinsic environmental challenges and counter-purpose results created by typical "green-building" programs in the US.

National Tour of Solar Homes-Roebuck Residence; Phoenix, AZ Oct 2006 & 2005.

One of the first code-permitted heavy-steel framed non-load-bearing straw-bale buildings in Arizona, built on a very modest budget, employs rainwater collection, natural daylighting and ventilation, recycled metal roofing, stained concrete floors, recycled cellulose insulation, and very efficient mechanical systems.

"Barriers & Opportunities to Environmentally-Responsible Design in Prod. Housing"; April 2001

Proceedings of ASES Forum 2001; Washington, D.C.. Paper on research and pedagogy of Fall 1999 Integral Studio, on environmentally-responsible design in mass-market housing

"Employing Environmental Awareness Toward A Design Methodology"; October, 2000
Proceedings of the ACSA West Regional Conference; Arizona State University, Tempe, AZ;. Academic paper and conference presentation covering research into the environmental issues and ethics of the built environment, and how that can inform the development a design methodology for integrative ecological design. Included precedent as well as examples from my own design work.

"Environmental Feedback: Do We Hear It?" Article in Connector Journal, Fall 2000 issue
Publication of the University of Oregon Department of Architecture; Eugene, OR. Article outlining my approach to bringing issues of sustainability and resource-efficiency to the students of my architectural construction materials and methods curriculum

"Making More With Less-Desert Marigold School Straw-bale Classroom Building". October, 2000
OCCUR Architecture and Education Conference; California Polytechnic University at Pomona; Pomona, California,. Invited exhibition of many approaches to the design of educational facilities on limited means, including Desert Marigold School, alongside work by Morphosis, McDonough Associates, Jeter-Cook-Jepson.

"Edge Of Green" Lecture Series; Arizona St. Univ. School of Arch.; Tempe, AZ; Spring, 2000.
Producer and coordinator of School of Architecture's lecture series for the 1999-2000 academic year. Topic was focused on the far "green edge" of environmentally-responsible design and building. Brought in far-ranging guests from all over the world, including Charles Jencks, Ken Yeang, Pliny Fisk, Gail Lindsey, and David Eisenberg.

"Desert Durable: Rastra vs. Integra"; Desert Dweller Journal; Publication of AZ VisionWeavers; Phoenix, AZ; Spring, 2000 issue.
Article comparing the environmental benefits, constructability, performance and cost of two "high-tech" alternative building systems appropriate for the low-desert.

***Pools to Ponds: Making a hazard a habitat*, unpublished photos and notes documenting experimentation; Phoenix, Arizona; 1999.**
Documentary narrative on the process of converting a standard residential swimming pool into a living, sustainable pond, complete with desert-appropriate flora and fauna. Intended to include resource listings and guidelines for making the transitions gracefully.

"Good Shoes...: Foundations for Straw-bale"*; The Last Straw Journal*; Winter, 1997.
Extensive discussion of the challenges faced in doing foundations for straw-bale structures in various regions and climates of the US. Includes a table thoroughly covering the options a designer should be aware of, along with the benefits and disadvantages to consider for each option.

"APS Environmental Showcase Home"; *AIA Environmental Resource Guide*; 1996.
Co-Author, along with Dean John Meunier of Arizona State University's College of Architecture and Urban Planning, of thorough dissertation on the many issues that went into the design of the ESH, the solutions arrived at, and the results that occurred.

Creative & Visionary Projects Competition: Sustainable Building; Denver, Colorado; Oct., 1993
An entry for the APS Environmental Showcase Home put together by a team from Jones Studio. We placed third in the parallel competition held with the exhibition.

***Architecture and the Sloping Site*; Arizona State University, Tempe, AZ; April, 1988.**
Graduate field study of the exploration and investigation into how a specific design constraint, a steep site, can be seen to affect residential design in certain predictable or definable ways. This work alludes to the idea that architectural expression can come purely from the various environmental factors impacting a design.

"*Low-Energy Cooling Retrofit for Neutra's "Desert House"*; Arizona State University, Tempe, AZ; April, 1987.

Graduate studies investigation of minimalistic ways to improve the climatic response and energy performance of a well-respected work of architecture. The goal was to improve the comfort, but not intrude on the existing aesthetic or function of the building any more than absolutely necessary.

"*Environmental Analysis of the Solar Hemicycle"*; Arizona State University, Tempe, AZ; Nov. 1986

Graduate studies analysis of the climatic response and designed augmentation through passive features, in the Jacobs II House, the "Solar Hemicycle", designed by Frank Lloyd Wright. Included basic environmental impact assessment, primarily from pollution prevention aspect of energy-efficiency.

***Phoenix Neighborhood Development and Infill Design Guidelines*; Arizona State University, Tempe, AZ; November 1986.**

Graduate studies co-author of detailed, broad exploration into the myriad issues influencing affordable housing in the Phoenix area. Areas uncovered included spatial impact on social interaction, durability of materials and systems, and climatic response from the site scale to the interior zoning. Included prototype designs proposed as alternatives to models being constructed at the time.

PUBLICATIONS & AWARDS (selected)

"The Green Studio Handbook, 4th Edition"; Routledge, London; Summer 2025

The 4th edition of the internationally respected book covering all facets of ecological "green" design, first published in 2006. Tom extensively expanded the Envelope section of strategies to include various low-complexity, "natural" building systems, along with new high-complexity, "hi-tech" building systems. Tom was also responsible for finding the ten new case study projects to include in the book, and the writing of seven of the ten case study sections, along with various editorial and updating tasks.

"Excellence in Teaching"; Univ. of Oregon Office of Sustainability; Spring, 2020

Based on unsolicited application and nominations by faculty colleagues and former student, received award from University's Office of Sustainability for excellence in teaching related to sustainability and environmental design.

"Jones-Glotfelty Container House"; Casas Internacional - #144; January, 2014

Publication of Jones-Glotfelty Container Home in international arts and architecture publication, with extensive photography. Concise description of project covered the conceptual approach to using containers, as well as specifics on other environmental systems, products and materials. Selected by publishers to presented as first project among 11 from around the world.

Coconino County Sustainable Building Program Award; Jones-Glotfelty Shipping Container House; Flagstaff, AZ; 2010

Regional sustainable design award, for this first-in-Flagstaff project. I was the Project Architect for the project.

Coconino County Sustainable Building Program Exhibition; Flagstaff, AZ; 2009

Exhibition and tour (as part of the National Tour of Solar Homes) included the under-construction Jones-Glotfelty Shipping Container House.

"McDowell Studios, Phoenix", *Desert Living*, 2007

Video online by CITY Publishing-Desert Living magazine, about the McDowell Studios commercial eco-renovation project with companion text.

"Developer unveils the potential of discarded, blighted storefronts", *Business Journal*, 2007

Article about and photographs of the McDowell Studios commercial eco-renovation project we designed.

"The Future Is Green", *Arizona Foothills, "*Custom Home" edition-2006

Interviewed extensively for, and quoted in, article on the state of affairs in green building in central Arizona in this fine-homes magazine. Our Sanders Eco-renovation project was featured in two full-page photographs, including the article title page.

"The Foam Home", *Smart Homeowner*. May/June, 2006

Article on, and photographs of, the Strata System Demonstration Spec-Home in this energy-efficient building trade magazine. Extensively interviewed about, and quoted on, the technology's attributes, benefits and challenges.

"Eco-Renovation", *Contact Magazine*, "Green Issue". March, 2006

Article on, and photographs of, our Sanders Eco-renovation project in this arts and architecture magazine. Detailed coverage of our innovative conceptual design approaches for environmentally-conscious renovation projects, as well as the materials and products used.

"100: Hotlist of One Hundred Desert Architects", *Desert Living;* July/August, 2005

Recognized for being an "activist environmental architect" unique to Arizona, and for our radical and innovative architectural philosophy and design approach.

"Roebuck Straw-bale Residence", *American Builder;* October, 2004

Concise description and photo on progress on constructing the first heavy-steel/straw-bale structure in Pinal County, Arizona, in this national trade magazine.

US Dept. of Interior - Community Gardens Citation Award; Healing Garden at the University of Arizona Maricopa County Extension Office; Phoenix, AZ; 2004

National award for the U of A Extension Office's Healing Garden project done as by the students of the Spring 2001 Design/Build Workshop class at ASU's School of Architecture.

Valley Forward Crescordia Award; Foothills Academy Straw-bale Campus; Scottsdale, AZ; 2003;

Regional design award, as the first commercial straw-bale project in-Scottsdale. I was the environmental design consultant, and led the nearly sub-contract construction of the straw-bale portion of project.

Valley Forward Merit Award; Ballogg Residence; Wickenburg, Arizona; 2003

Regional design award, for this unique, economical residence. I was the architect, and also the general contractor and builder of the project. At $300K cost, it tied a multi-million dollar house for the award in this competition.

National Tour of Solar Homes; Phoenix, AZ Oct 2002, 2001, 2000

Despite not being a residence and even uncompleted when first included, the Desert Marigold Straw-bale Classroom Building has been deemed of such importance for its ground-breaking use of straw-bale construction in an educational building it was included on the National Tour for three years, running.

"Foothills Academy College Preparatory", *American Contractor*; Vol. IV, #2; 2002

Interviewed extensively for, and our construction company's straw-bale work featured in photographs in, cover story on construction of the first straw-bale institutional structure in Scottsdale, Arizona, in this national trade magazine.

"Green Architecture: Building earth-friendly homes", *Phoenix Home & Garden;* May, 2002

Interviewed extensively for, and quoted in, article on the state of affairs in green building in central Arizona in this arts and architecture lifestyle magazine.

"Idea House", *Phoenix Home & Garden;* May, 2002

Interviewed extensively for, and quoted in, article in this arts and architecture lifestyle magazine, on the APS Environmental Showcase Home project.

Valley Forward Merit Award; Desert Marigold Straw-Bale Classroom Building; Phoenix, AZ; 2002
Regional design award, for this first-in-the-city straw-bale project. I was the design architect, and led the nearly all-volunteer construction of the project.

"Desert Marigold Waldorf School Straw-bale Classroom Building", *Educational Facilities: The American Institute of Architects Exemplary Learning Environment Program*; 2002
Overview of the Desert Marigold Straw-bale Classroom project, based in the OCCUR exhibition and the AIA Exemplary Learning Environment award the project had received.

Valley Forward Crescordia Award; ASU Integral Design Studio; Scottsdale, Arizona; 2001
Regional design award for this inaugural Integral Studio at ASU exploring environmental production housing. I was one of the founders of the IS program at ASU's School of Architecture, and led the first studio in the program.

American Society of Landscape Architects National Award; Phoenix Zoo Exhibits for Arabian Oryx and Bighorn Sheep; Phoenix, Arizona; 2000
National design award, for its landscape design aspects, for this unique rammed-earth project in the public realm. I was part of the design team as the environmental design and technology consultant.

Valley Forward President's Award For Excellence in Environmental Design, and Crescordia Award; Phoenix Zoo Exhibits for Arabian Oryx and Bighorn Sheep; Phoenix, Arizona; 2000
Multiple regional design awards, including the "best in show" that year, for this very-well-received rammed-earth project in the public realm. I was recognized as the environmental design and technology consultant.

AIA National Committee on Architecture and Education Citation Award; Desert Marigold Straw-bale Classroom Building; Phoenix, Arizona; 1999
National AIA design award, for its unique educational design aspects, for this first-in-the-city straw-bale project. I was the design architect, and led the nearly all-volunteer construction of the project.

Valley Forward Crescordia Award; Scottsdale Green Building Program; Scottsdale, AZ 2000
Regional design award for this innovative green building assessment program. I was included as one of the early participants and consultants with the program.

"Taming An Earthen Oven Dragon," Green Teacher, Spring 2000; Toronto, ONT, Canada
Article on the design and construction of various natural building projects at the Desert Marigold School, including both the straw-bale classroom building and "cob" earthen oven I led the creation of.

Valley Forward President's Award For Excellence in Environmental Design, and Crescordia Award; Arizona Public Service Environmental Showcase Home; Phoenix, Arizona; 1995
Multiple regional design awards, including the "best in show" that year, for this nationally-recognized environmental residential demonstration project. I was recognized as the Project Architect while working for Jones Studio Architects, Inc.

***The Environment Comes Home*; University of Arizona Press, 1995**
Contributed to this book about the APS Environmental Showcase Home by writing a draft for Chapter 4 on Materials. Draft included description of all the environmentally-responsible materials and product selections made in the ESH, and the philosophies and technical basis that directed those choices. Final text for Chapter 4 was adapted from this draft by books authors, J. David Pijawka and Kim Shetter.

*"***Timberline Lodge: The WPA and the Making of Architecture"; University of Washington, Seattle, WA; November 1985**
Final project undergraduate paper documenting the design and construction history of the Timberline Lodge in Oregon, and the contributions of the CCC and WPA during the Depression.

FUNDING PROPOSALS/AWARDS

Arnold W. Brunner Grant, AIA New York, "*Amazon Edge: A MassBu Building for US-Ecuadorian Exchange*"; $15,000 award, February, 2026

Grant awarded to a team including Tom Hahn as architect and consultant, led by Jonas Hauptma n of Virginia Tech, and including Lucas Oshun of Regeneration Field Institute. Award for further development of the facilities, equipment and techniques, and a prototype design for a building, to use a prefabricated, panelized bamboo building system, MassBu, that has been in development since the late 2010's.

Davis Family Fund, Studio-teaching Enrichment Grant, Univ. of Oregon Dept. of Architecture; $4500 award; Spring, 2024

Grant awarded based on application seeking support for bringing innovative student experiences, guest speakers and reviewers, and other educational content to my intermediate and advanced architectural design studios.

Bruton Fund, Faculty Dev. Grant, Univ. of Oregon Dept. of Architecture; $3000 award; Spring, 2022

Grant awarded based on application seeking support for the explorations of an Advanced Architectural Design Studio in AY 2022-23, for travel, guest speakers, and studio printing activities

West Valley Child Crisis Center Grant; $1000 award; "Conceptual masterplanning and schematic designs for new shelter facility"; June 1999

In collaboration with ASU Joint Urban Design Program Initial programming, charrette design, and development assistance being provided to WVCCC as the groundwork for future ASU research and service learning opportunities. Funding so far has been direct from WVCCC, but potential exists for both private- and government-sector funding for both the design and construction of this project.

Arizona Department of Environmental Quality Waste Reduction Act Grant; $70,000 requested; "Green Construction Market Information Infrastructure"; October, 1998

In collaboration with Arizona Environmental Strategic Alliance A strong team of government, academic and private-sector entities combined their energies toward this proposal. Though not accepted in this round of awards, the proposal is strong enough and important enough to be resubmitted for future proposal requests.

Arizona Department of Environmental Quality Waste Reduction Act Grant; $125,000 requested; "Green Housing for Arizona"; October, 1998

In collaboration with Arek Construction, LLC. This proposal was very hastily assembled by others, with my participation being requested and included only days before the submission deadline. Though I support the concepts in the proposal, I had little input on the specifics of the project. This proposal, however, is strong enough to warrant being submitted to ADEQ again, or to other funding sources.

ASU Mini-grant funding; $300 awarded; "Preliminary contact work for environmental building materials database"; October, 1998

This award allowed myself and an independent study student of mine to begin exploring the realm of alternative and natural building materials resources. The intent was that the funding would initiate the database, so that the "draft" version of it could be used to leverage more funding from other entities.

ASU Mini-grant funding; $300 awarded; "Preliminary investigation for alternative materials research efforts"; October, 1997

This award allowed me to travel to two major alternative building conferences, Austin's Green Builder Conference, and the International Straw-bale Construction Conference at Kingston, New Mexico to investigate what opportunities exist for research and funding in environmentally responsible building. Many connections from around the country were initiated or strengthened at these two events.