

ANNUAL DESIGN COMPETITION SEPTEMBER 12-14, 2014

THE ARID LANDS INSTITUTE: HOUSE OF RETENTION

SETTING THE SCENE LOS ANGELES /



The Los Angeles River with Adjacent House of Retention Site

The City of Los Angeles represents a fabled place of endless possibility and an accumulation of individual hopes. Discovery pervades everyday life, as the region's density and diversity combine to provide bountiful hidden gems (new and old) to suit any taste. Its subtle seasons, with time passing both quickly and not at all, bestow surprises on Angelenos going about even the most mundane of routines: crashing waves in the River channel, wild coyotes on Hollywood streets, grey skies during June gloom, or clear vistas of Downtown across an elevated highway.

We understand that there must continue to be places with which people can identify and feel included as individuals and as Angelenos. We understand that rethinking development patterns with respect to critical urban resources such as land, existing structures, water, and open space are a priority as well. We understand that our year-round temperate climate offers unique opportunities to embrace indooroutdoor connections. We understand that decentralizing the infrastructure associated with water and energy (e.g., implementing green streets instead of relaying on central water treatment plants) can help shift development toward educational

environments that prompt community involvement and stewardship, and create fundable projects.

For most of its history, Los Angeles has suffered from large-scale planning that has been singular in its intentionfrom water management to highway implementation to neighborhood division. These solutions have consequently had negative effects upon much of our natural environment: wasting resources, destroying habitat, and ultimately separating Angelenos' connection to place and role within our indigenous ecology and urban situation.

Quoting the Arid Lands Institute, "Water scarcity is both the history and the future of the American west. Re-thinking water use, particularly in the face of climate change, will be central to the region's survival. The work exceeds the grasp of a single discipline, and touches all dimensions of the way people live and work. Sustaining the US West in the face of water scarcity and hydrologic variability brought on by climate change will require strategic architectures, infrastructures, and urbanisms that promote adaptation and resilience."

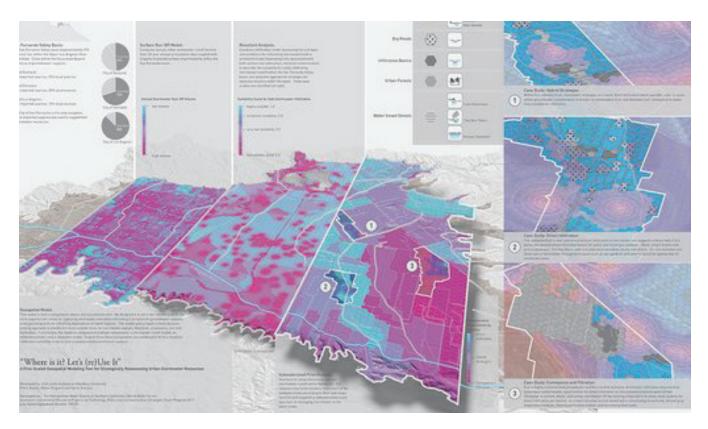
From earthquakes to wildfires, Southern California is no stranger to natural disaster. However, rising sea levels and increased river flooding associated with climate change will require improved capacity of individuals, communities, institutions, businesses and systems within the city to survive, adapt, and grow - increasing resiliency one project at a time.

The Los Angeles River is a seasonal river that collects the erratic run-off from an 834-square-mile watershed area, at times causing serious damage to the communities on its banks. In the 1940's, the River channel was lined with concrete in the hopes of mitigating its flooding nature, but as the watershed has become more heavily urbanized and covered with impermeable surfaces, the amount of water flowing into the River has increased to the limit of the capabilities of the decades-old design.

Public open space in Los Angeles is scarce. According to a 2007 survey completed by the Trust for Public Land, parks made up a mere 7.9% of the total area of the City as compared to 19.6% for New York City, 18.0% for San Francisco and 16.3% for Boston. Studies such as the 2007 Los Angeles County Department of Public Health's "Preventing Childhood Obesity: The Need to Create Healthy Places," also found correlations between economically poor and park-poor communities.

Over 9 million people currently live in Los Angeles County. Affordable housing, job opportunities, and cultural amenities are not available to all. Meanwhile, California's population is expected to double by 2050. More efficient land uses, higher density housing, and multiple-benefit investments will be crucial to meeting Los Angeles' demands today and challenges in the future.

THE ARID LANDS INSTITUTE MISSION /



The Arid Lands Institute is an education, research and outreach organization dedicated to design innovation in waterstressed environments. The Arid Lands Institute's (ALI) mission is to inspire design excellence in response to hydrologic variability brought on by climate change. ALI's vision is a water-smart built environment in the US West serving as a model for dry lands development globally.

ALI provides an open, lab-like environment hospitable to collaborators from multiple universities, serving as a resource for the academic, public, and private sectors. Critical thinking, design excellence for the public good, and hospitality to diversity including a rich web of collaborative partnerships that reach across cultures and generations - are central to ALI's programs and operations.

ALI engages the challenges of water scarcity through three core programs:

- Design Education: with an emphasis on architecture, landscape, and urban design
- Applied Research: including geospatial modeling tools developed in partnership with agencies, firms, and communities
- Public Outreach: including workshops, lectures, symposia, conferences, and design competitions

Since inception ALI has engaged hundreds of students and convened conferences, symposia, and workshops. These events have brought toegether thousands of citizens, scientists, and policy makers, while enabling collaboration with professional and academic teams in 28 states and 15 nations.

ALI is the only design-centered program of its kind.

SITE HOUSE OF RETENTION /



Aerial Image Looking North Credit: Google Earth

The approximately 2-acre site is located north of Downtown Los Angeles and just east of the Los Angeles River. Dodger Stadium is located to the west, across the River.

The site is bounded by major infrastructural pieces, the largest and most prominent of which is the River itself, running from the San Fernando Valley to its outlet at the City of Long Beach. Advocates for the River recently won an important battle in the on-going revitalization effort with the selection of Army Corps of Engineers' Alternative 20, which in conjunction with the *Los Angeles River Revitalization Master Plan*, will commit federal resources to an expansive restoration. According to the master plan, river revitalizaton includes restoration of the River's natural ecological and hydrological functions, re-creation of the corridor's continuous riparian habitat, and enabling the development of multi-benefit green spaces within the River channel that provide both open space and water quality benefits.

Straddling either side of the River and running adjacent to the site runs the heavy freight rail lines of the Union Pacific Railroad. The Metro Gold Line runs north of the site, elevating to pass over the River, rail, and local roadways. No metro stations exist within a 5-minute walking radius of the site.

The site itself is flat and houses four buildings of various sizes. However,

these buildings are not currenlty in habitable condition. Per the Cornfield Arroyo Seco Specific Plan, the site is zoned Urban Village. This designation permits the integration of commercial, residential and industrial uses within a single site. From urban agriculture to tech start-ups to a brewery, the site may house an interesting and exciting mix of uses.

The soil below the proposed site is permeable: alluvium deposits from the river and arroyo inflows (before they were covered in concrete) consist of silts, sands and gravels. There is also a persistent possibility of soil liquefaction during a seismic event.

BUILDING PROGRAM HOUSE OF RETENTION /



Plan Image (site photographs 1, 2, and 3 on subsequent pages) Credit: Google Earth

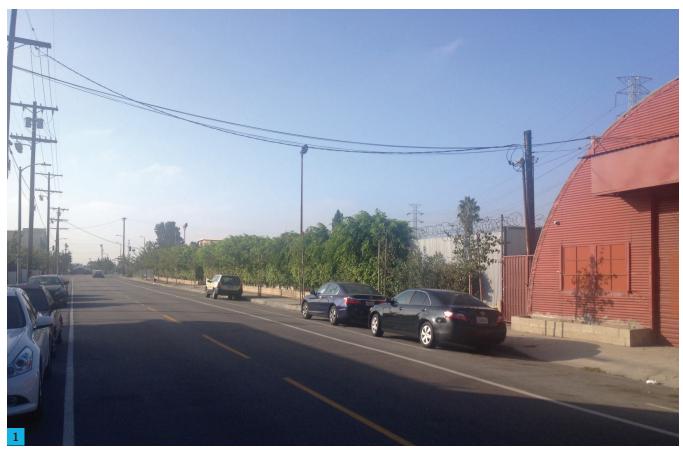
Lean operations and a strong connection to the outdoors are central to who we are and what we do. The Arid Lands Institue (ALI) imagines a building that conserves, treats, recycles, stores, and infiltrates all of its water; produces more clean energy than it uses; engages and respects the Los Angeles River; is hospitable and generous in its engagement with its neighbors of all species; and serves as a model of climate-adaptive architecture and urbanism in dry lands.

A NOTE ON THE ELEMENT OF TIME

ALI is inspired by the archeological record of societies that have coped, struggled, thrived, adapted, flourished, dispersed, disappeared, and reconfigured in dry lands throughout the course of history. ALI seeks an architecture that not only meets the challenges of its time, but anticipates its own end as a future archeology. ALI is committed to design innovation that:

- anticipates variability: short periods of extreme abundance and long periods of scarcity
- uncouples water from energy
- exploits the full expressive potential of water systems as architectural and urban form
- inspires a water-conversant society across generations, cultures, and sectors

BUILDING PROGRAM SPACE NEEDS /



View south along Avenue 18

A dynamic balance, tension, dialog, and/or embrace between indoors and outdoors, and between inspiration and practicality is implied in all pieces of the program. Furthermore, the program reflects the culture of the Arid Lands Institute as a whole: both highly collaborative and very focused.

DESIGN EDUCATION

Core Studio: we foresee serving 20 students year-round in a research studio setting, to include work surfaces, output devices, pin-up and debate space, and appropriate infrastructure for 20 dedicated workstations with capacity for A/V, projection, video conferencing, etc. **Plug-In Studio**: we would like to be able to host up to 30 visiting students and their instructors from other universities, for fieldwork visits of varying lengths. When not occupied by visiting studios, this space might generate rental income or be used as flexible event space.

Fabrication: a digital and analog model making shop with ample space for trial-and-error demonstration projects at full scale.

Seminar/Meeting Rooms: three spaces each capable of hosting 15 people for meetings/seminars/discussions.

Visiting Fellow Work Spaces: a suite of spaces appropriate for 6 fellows to conduct focused work independently with privacy and quiet; hang out; advise students; and gather for informal exchange.

Field Station Support: ability to clean, store, prep, and load camping supplies and equipment for 20 (tents, stoves, folding chairs, water filters, food coolers, propane tanks, axes, maps, atlases, car repair tool kits, first aid kits); cameras, telescopes, and surveying equipment; two large vans or light trucks and clean fuel/ clean charging options for both. To include sinks and laundry.

Bunk Room: minimalist accommodations (cots) for short-term overnight stays for up to 12 students.

BUILDING PROGRAM SPACE NEEDS /



View north along Avenue 18

APPLIED RESEARCH

Library: room for 10,000 volumes, centralized or distributed, with inspired spaces to enjoy them in, including the ability to work at a desk, lounge in a chair, recline on a couch, and/or stand and work over large volumes (atlases).

Water-Monitoring Lab: a wet, welllit lab that requires sinks, work surfaces, good lighting; equipment to include small desk-top ovens, vacuums, scales, bottles, beakers, flasks, drying racks; storage shelves for boxes of water bottles getting mailed in by citizen scientists, lab coats, gloves, goggles, etc.

PUBLIC PROGRAMS

Gallery: for exhibitions, installations, projections including displays of large-format photography, design competition boards, and full-scale experimental demonstration projects.

Auditorium: flexible enough to host small public gatherings (presentations, workshops) and expand for larger events (symposia, conferences).

Gardens: outdoor spaces might produce food, provide habitat, serve as parts of the building program, model best practices, and/or be used for recreation, exercise, and events put on by the Arid Lands Institute and neighboring community.

BUILDING PROGRAM SPACE NEEDS /



View north from the Broadway Bridge

SHARED / THROUGHOUT

Headquarters: inviting offices for the team that holds the fort. 3 directors, 2 administrative/ communications support, 1 grant writer, 1 IT, 1 maintenance.

Flexible Space: the ability for children of staff/faculty/students to play, nap, or do homework unsepervised without distracting their parents.

Bathrooms: for students, fellows, staff, and the public and to include the ability to shower.

Hospitality: kitchen with ability to prepare an indiviual meal or convert to catering for events; indoor and outdoor eating options that can be reconfigured for small and large events. Laundry: on site.

Transport: bike racks and clean fueling and/or charging stations for 20 vehicles.

Utilities: voicemail/reception, highspeed broadband internet (maximum bandwidth), video conferencing ability, storage/equipment for basic janitorial services, gardening equipment, etc.

BUILDING PROGRAM SPREADSHEET /

PROGRAM	QUANTITY	NSF	TOTAL	DESCRIPTION
DESIGN EDUCATION				
Reception/Waiting	1	500 SF	500 SF	Shared w/ Public Programs
Core Studio	1	3,000 SF	3,000 SF	
Plug-In Studio	1	1,500 SF	1,500 SF	
Fabrication	1	2,000 SF	2,000 SF	
Seminar/Meeting Rooms	3	750 SF	2,250 SF	
Visiting Fellow Work Spaces	1	1,000 SF	1,000 SF	
Field Station Support	1	1,000 SF	1,000 SF	Requires adjacency to loading area
Bunk Room	1	1,000 SF	1,000 SF	
APPLIED RESEARCH				
Library	1	3,000 SF	3,000 SF	
Water-Monitoring Lab	1	2,000 SF	2,000 SF	Prep and storage areas
PUBLIC PROGRAMS				
Gallery	1	1,000 SF	1,000 SF	
Auditorium w/ Reception Area	1	2,000 SF	2,000 SF	
Gardens				Minimum 25% of site area
SHARED / THROUGHOUT				
Headquarters	1	2,000 SF	2,000 SF	
Flexible Space	1	500 SF	500 SF	
Restrooms	2	500 SF	1,000 SF	Shared w/ Public Programs
Hospitality	1	500 SF	500 SF	
Laundry	1	100 SF	100 SF	
Storage	1	500 SF	500 SF	Office supplies, fieldwork gear, etc.
Creative Office Space	1	10,000 SF	10,000 SF	Square footage may be broken up (i.e.: 2 x 5,000 SF) but should include office and ADA restroom(s) for each
Retail	2	1,500 SF	3,000 SF	Square footage may be broken up (i.e.: 3 x 1,000 SF; 2 x 1,500 SF; 1 x 3,000 SF) but should include office and ADA restroom(s) for each.
Café	1	1,500 SF	1,500 SF	Include ADA restroom and storage
Mechanical	1	500 SF	500 SF	C
Janitor	3	75 SF	225 SF	
Receiving/loading Dock	1	500 SF	500 SF	Centrally located
TOTAL	30		40,575 SF	

ADDITIONAL REQUIREMENTS

Parking: 2 spaces per 1,000 SF Clean fueling/charging stations Bike Racks

SUBMISSION /

WE ENCOURAGE SUBMISSIONS TO:

- Create precedents that could be translated into other mixed-use environments.
- Incorporate creative planning approaches and concepts.
- Employ a design ethic that is sophisticated, and both socially and environmentally responsible.

JUDGING AREAS

- Overall theme and supporting concepts.
- Sustainability and material health.
- Innovation and excellence in: (1) Design, (2) Concept, (3) Communication.

MANDATORY (ANONYMOUS) SUBMISSION REQUIREMENTS

Content

• All 2D/3D visuals required to communicate your idea, and up to 500 words of explanatory text. Identify your board with your registration number only, located on the lower right corner of the layout. Submissions with individual names or office locations will be disqualified.

Electronic Submission

- One 30"x42" electronic board in PDF format. Name the PDF file with your team number only (for example: 120.pdf).
- One 30"x42" electronic board in JPG format. JPG files must be no larger than 2 megabytes. Name the JPG file with your team number only (for example: 120.jpg).
- Your "hero/big idea" image in JPG format. JPG files must be no larger than 2 megabytes. Name the "hero/big idea" image with your team number and the word "hero" (for example: 120hero.jpg).
- The link for submitting these electronic submissions is found in the accompanying email.

Hard Copy Submission

• Once your electronic submission is complete, print your 30"x42" board and give to the designated representative in your office and it will then be transferred to Los Angeles for review.

Atlanta: Manuel Cadrecha	Houston: Ray Beets	San Francisco: Cathy Simon
Boston: Jeannine Campbell	London: John Drew	Seattle: Erik Mott
Brazil: Fernando Rocco Luiz	Los Angeles: Nick Seierup	Shanghai: Hiroyuki Shinohara
Charlotte: Phil Freelon	Miami: Pat Bosch	Toronto: Duff Balmer
Chicago: Jerry Johnson	Minneapolis: Dave Dimond	Vancouver: Jim Huffman
Dallas: Ron Stelmarski	New York: Rob Goodwin	Washington DC: Carl Knutson
Dubai: Diane Thorsen	Ontario: Andrew Frontini	
Dundas: Jason Sweers	RTP: Jim Merriman	