



 Managed by AIAS NJIT Freedom by Design

## ADU Competition Brief

### Introduction

Montclair Gateway to Aging in Place (**mGAP**), a non-profit 501 (C) (3), along with partner organizations, is initiating an architectural design competition to encourage the adoption of Accessory Dwelling Units (ADUs) to help address the local housing shortage.

**mGAP** is dedicated to identifying GAPS between existing services and those services needed to sustain older citizens who want to remain residents in the communities they love, i.e., *aging in place*. **mGAP** has advocated for local communities to adopt Accessory Dwelling Unit (ADU) ordinances to help address the shortage of accessible housing options for aging in place. As of March 2023, Montclair homeowners have the option of constructing ADUs in their backyards to provide new housing options suitable for: aging-in-place, housing the disabled, and accommodating small family units of one or two adults. We hope to see such ordinances replicated throughout New Jersey.

Our newspapers are rife with stories about the shortage of financially sustainable housing for diverse populations in American communities. Historically, housing development has focused on the single-family dwelling designed for an idealized family of two parents and two children. This convention no longer reflects the true demographics of our society. In fact, by 2034 New Jersey will have more residents born between 1945 and 1975 than children in the public schools. How will NJ take steps toward housing this aging population in the next decades? How can NJ keep these residents from fleeing our Township, our State, and even our region in favor of States and regions where living is more affordable?

Medical research has confirmed that older individuals thrive when they decide to remain in the communities that they have lived in for decades:

- where they retain their psychological independence for as long as possible
- where they have access to known houses of worship and support networks
- where they can obtain continuous and consistent medical care, and
- where they have internalized street maps and community transportation options

These are some of the challenges NJ seniors (and others not served by the traditional housing market) face as they age:

1. New Jersey property taxes are among the highest in the nation. As older citizens age, the burden of property taxes will propel many of them to seek more financially sustainable housing situations.
2. New Jersey is the most densely developed State in the nation. A legacy of that development is single-family zoning which governs local land use decisions. NJ first-ring suburbs like Montclair do not have sufficient open land for developers to build both age-friendly and financially sustainable housing for independent aging in place.
3. Essex County is the second most expensive NJ county to live in.
4. Suburban Essex retirees who own their homes more than likely live on fixed income. Retirement investments have not kept up with inflation; over the past decade investment growth has been constrained by sluggish interest rates. Factored into the financial profile of this population are ever-increasing property taxes. Even in a seller's market, if these older homeowners decide to sell, it will be difficult to obtain financially sustainable alternative housing options in the communities they have resided in for years.
5. Ironically, the higher value assessments of their property will only make it harder for these homeowners to tap into financially capped County-run home assistance programs. Many older homeowners are also excluded from low-income federal subsidies even though they report having to make tough decisions between heat and medicine during the cold winter months.

Our proposed solution to these challenges – ADU construction!

### **Project Director: Montclair Gateway to Aging in Place**

- Montclair Gateway to Aging in Place (**mGAP**): **mGAP** is an advocacy and service organization seeking solutions to the challenges faced by those of us of retirement age who wish to remain in our communities as we age. The organization's principal activities are to address the deficiency of suitable housing opportunities for our age group and to provide skills training and access to the on-line digital domain and its services.

### **Project Manager: AIAS NJIT Freedom by Design will manage the competition.**

- AIAS NJIT Freedom by Design: The AIAS community service program in partnership with the **National Council of Architectural Registration Boards (NCARB)**, uses the talents of architecture students to **radically impact** the lives of people in their community through modest design and construction solutions. The program embraces efforts to provide both design-build and engagement solutions to address five barriers: physical; educational; environmental; socio-economical; cultural.

## Project Sponsors: AARP and The Partners for Health Foundation

- Funding for this competition has graciously been provided by AARP and Partners for Health Foundation. The mission of both organizations emphasizes partnerships for advancing health equity through learning, grantmaking, and advocacy.

## The Competition

This is an ideas competition which has two major goals:

1. Address the housing income challenge for seniors who want to age in place
2. Propose solutions for increasing density in first ring suburbs that are least impactful on streetscape and infrastructure.

With great design insights and innovative thinking, small-scale architecture can create viable, sustainable opportunities for seniors to age in place, and open the suburbs up to more and better ways to live. The **mGAP** ADU Design Competition, sponsored by AARP and The Partners for Health Foundation, would like to hear from representatives of universities, schools, and colleges offering architecture/design studies. We are tasking both individual and teams of undergraduate and graduate architectural students currently enrolled in an architectural program in the northeastern quadrant of the USA to design a **detached** ADU suitable for a first ring NJ suburban community. Designs should explore how architecture can offer a new housing unit on existing single-family plots that will potentially:

- generate new rental income for the homeowner
- provide a barrier-free residence on owner's property
- conform to a minimum requirement of 6 ft to property line
- conform to a maximum height of 15 feet to the top of the roof

We intend to use these designs as: 1) proof of concept and 2) to generate further dialogue within Suburban Essex and environs toward relaxation of existing zoning constraints where justified.

Competitors will start design development process with a generic design based upon a real case scenario to provide context. See Appendix. (Case herein referred to as *generic case*.)

See appendix for survey and photos of the targeted generic case study. Competition participants are invited to submit their designs for a free-standing, barrier-free ADU that would accommodate a hypothetical one or two individuals.

#### Design Specifications:

Since our goal for this competition is to generate creative design ideas at different scales, the designer will be required to select **one** of the following ADU sizes: 575 sq. ft., or 800 sq. ft., or 1200 sq. ft. ***(Multiple submissions will be disqualified)***.

Proposals should be designed according to the provided survey (see Appendix), understanding that the 1200 sq. ft. ADU will require a variance. The number of bedrooms provided is at the discretion of the designer.

For the purpose of this competition, designers should assume that there is room for one additional car in the driveway, although every ADU occupant will not necessarily have a car.

The designs will be judged on the following general criteria.

1. **Detached** describes an ADU that is free-standing and should not share a wall with any other structure on the property.
2. **Sustainable** describes an ADU design that incorporates materials, products, means and methods meant to reduce the environmental impact (e.g. proper orientation, shading, concern for indoor environmental quality, water efficiency, and resilience to potential hazards, etc.).
3. **Adherence to the Spirit of Universal Design** means an adherence to local accessibility requirements. Designs should be accessible and inclusive, incorporating universal design principles to ensure usability and adaptability for all users, including people with disabilities or special needs.
4. **Gentle Densification** describes that quality of exterior of the ADU design that is compatible with the look and feel of the existing single-family home as well as the neighborhood. This ADU should blend into the streetscape and not call attention to itself. We are looking for designs that consider aesthetics, architectural style, scale, and neighborhood character, and have a positive impact on the community by contributing to alternative housing, neighborhood revitalization, or social equity.
5. **Clarity of Circulation** describes an ADU design that offers free and unimpeded movement following a logical arrangement.
6. **Spatial organization** describes an ADU design that meets the needs of aging in place as described in this brief.

7. **Buildability** describes an ADU design that can be constructed on the provided survey site (see Appendix) by following reasonable and accepted construction methods. We are interested in innovative and cost-effective solutions that minimize expenses and promote affordability.
8. **Innovation**. We are interested in designs that incorporate creative use of space, and original ideas.

Specifically, designs should be cost-effective, environmentally responsible, and energy-efficient.

Comfortable accommodations must include:

- Sleeping Area
- Living/working area
- Cooking Area
- Bathroom with walk-in shower
- Small Storage

Participants are *required* to start the design process with generic case adhering to zoning restrictions involving privacy and height limitations and which also adheres to NJ storm water management guidelines. We are providing an illustrative property survey to help start the process. Competitors will be allowed to present only one of the three size variations described above.

**Overall Building Specifications:**

Competition designs must adhere to given generic case restrictions. Detached accessory buildings must be located in the rear yard of the homeowner's plot.

[Note that the generic case dimension between the north side of the house and the shed is 6.14 ft. This space is currently a paver walk leading to a paver patio at the rear of the house. The dimension between the north side of the shed and the north property line is 5.24 ft. See Appendix detail.]

Additional Permeable Materials Specifications: The permeable surface must be ADA accessible (e.g. hollow core concrete blocks).

**Student Competitors:**

All ADU designs will be submitted by current undergraduate and graduate college-level students and cannot represent the output of a professional architectural firm.

**Prizes: Total Prize Fund: \$5,000**

**Note: Contestants can only win in one category.**

<b>First Prize (Winner Overall):</b>	<b>\$2,000</b>
<b>Second Prize (Second Overall):</b>	<b>\$1,500</b>
<b>Third Prize (Third Overall):</b>	<b>\$1,050</b>
<b>Best in Category (575 sq. ft.):</b>	<b>\$ 150</b>
<b>Best in Category (800 sq. ft.):</b>	<b>\$ 150</b>
<b>Best in Category (1200 sq. ft.):</b>	<b>\$ 150</b>

Construction: The competition seeks design ideas that:

- show imaginative solutions for comfortable-to-live-in interior solutions, and
- show materials and methods of construction for cost estimates.

Winning entries will not be considered for construction. Design ideas will be collated into a *Design Ideas* booklet to raise awareness regarding the potential of ADU construction for increasing the pool of housing options in a first-ring suburb like Montclair.

### **Competition Schedule:**

June 30, 2023:	Public Announcement
July 26, 2023:	Early Bird Registration
July 31, 2023:	First Public Q & A via Zoom
August 7, 2023:	Second Public Q&A via Zoom
August 21, 2023:	Third Public Q&A via Zoom
September 13, 2023:	Fourth Public Q&A via Zoom
September 20, 2023:	Registration Deadline
September 30, 2023:	Closing Date for Questions
July – October 25:	Design Development
October 25, 2023:	Deadline for Submission
October 30, 2023:	Deadline for Juror scoring
October 31, 2023:	Announcement of Winners
November 5, 2023	Award Ceremony

Notification to Competitors Regarding Award Ceremony: *You will be notified by email if your design is considered for a prize, and if your attendance at a ceremony will be necessary. Notification will be on October 31, 2023. Details will follow.*

Competition Entry Fee: \$30.00

#### Publicity:

Responsibility of AIAS Chapter of Freedom by Design at NJIT:

- will use social media advertising /Instagram/email/
- target audience: Northeast Quad

Responsibility of **mGAP**

- direct outreach to Schools of Architecture
- direct outreach to Municipalities

#### Submission Requirements:

Participants are required to upload one digital landscape presentation which must not exceed 10 MB in pdf, and the 10 MB will be inclusive of sketches, variations, plans, sections, elevations, diagrams, and/or other presentation tools to explain their proposal.

- No video files are accepted
- All information provided must be in English
- All submissions must be uploaded via the **mGAP** Submission Form. A Submission link will be provided to all registered contestants
- Presentation must not indicate any information related to an individual's/team identity
- Competitors will use assigned group number only
- Participants who do not comply with the requirements will be disqualified

Project Preview: Required to upload one project preview image from the presentation that best describes the project.

- At least 2000x1680 pixels large, oriented horizontally, no more than 10MB in size, and in pdf format
- Will be used for promotional materials to showcase project in case project is selected as winner
- Competition jury will not see the selected project preview image

**Deliverables Set:** (Please note that the presentation below is a suggestion only. Participants can choose to use a selection from it or, alternatively, propose a completely different set that would explain their design in the most efficient manner.)

*Layouts conceived as two (2) design boards in graphic scale (1/4" = 1 ft) with minimum restriction of 300 dpi plus for renderings (renders) for each ADU submission at three floor-print sizes, e.g. 575 sq. ft., 800 sq. ft., 1200 sq ft. Line Drawings and Plans (including elevations, sections) and renderings (renders) required, e.g.*

- Site Plan

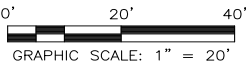
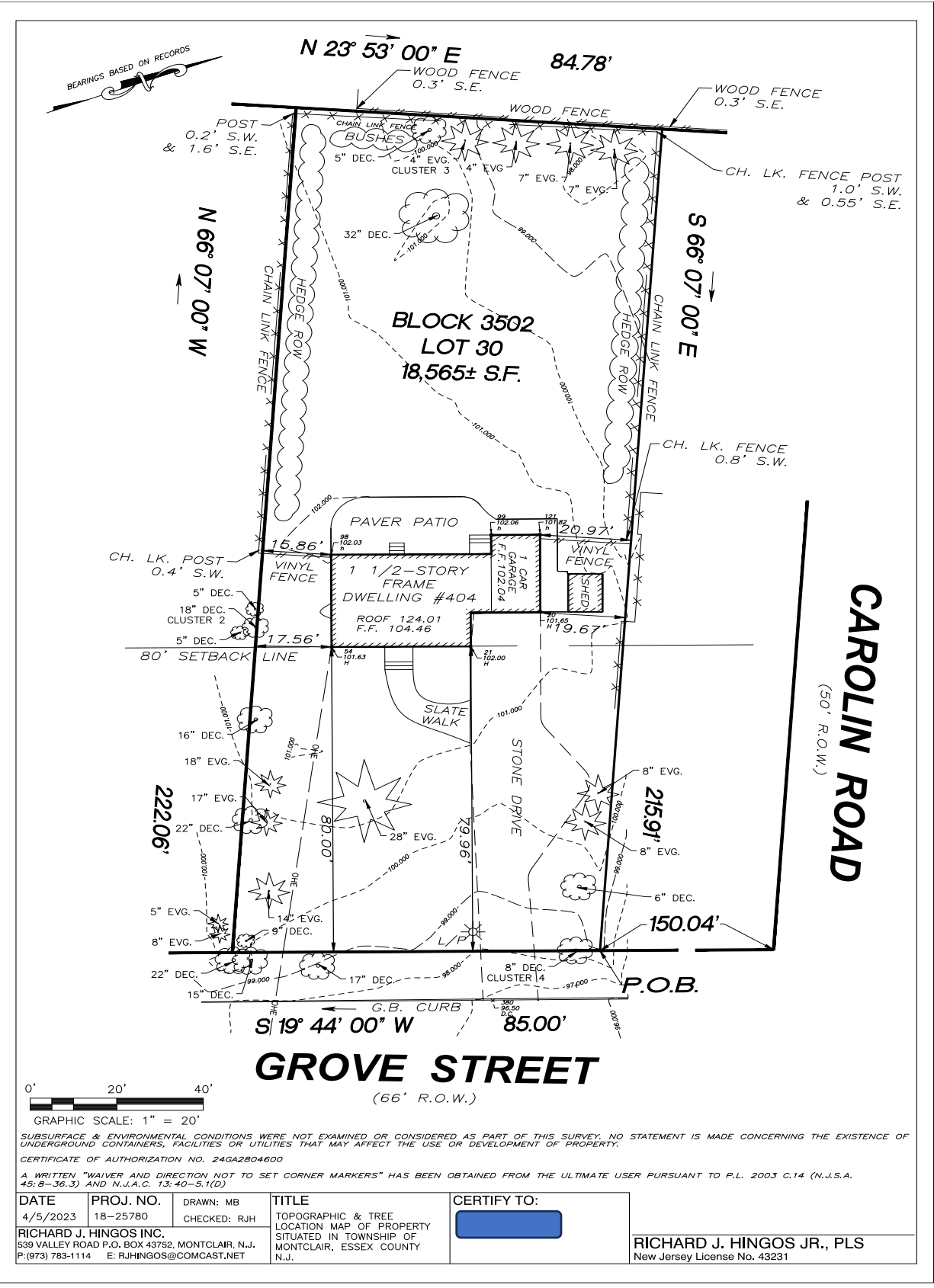
- Perspective views (interior perspective and exterior perspective)
- Elevations
- Primary Sections
- Floor plan (presumed ground floor plan)
- Details
  - Envelope: exterior
  - Methods of construction
  - Interior finishes
  - Key Materials
- Axonometric drawings providing information on building and architectural concepts
- Diagrams
  - Circulation
  - Lighting
  - Energy Systems
    - heat pump(s) required
  - Accessibility Diagram

Appendix includes:

- Generic case survey
- Generic case street views
- Generic case elevations



# APPENDIX



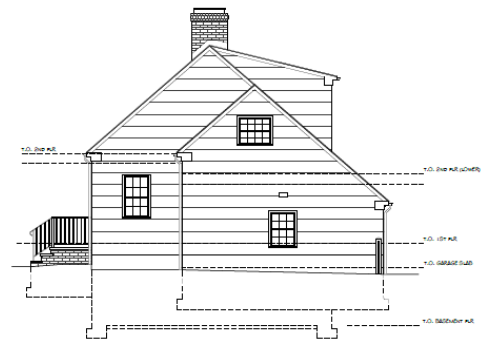
SUBSURFACE & ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND CONTAINERS, FACILITIES OR UTILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF PROPERTY.

CERTIFICATE OF AUTHORIZATION NO. 24GA2804600  
 A WRITTEN "WAIVER AND DIRECTION NOT TO SET CORNER MARKERS" HAS BEEN OBTAINED FROM THE ULTIMATE USER PURSUANT TO P.L. 2003 C.14 (N.J.S.A. 45:8-36.3) AND N.J.A.C. 13:40-5.1(D)

DATE 4/5/2023	PROJ. NO. 18-25780	DRAWN: MB CHECKED: RJH	TITLE TOPOGRAPHIC & TREE LOCATION MAP OF PROPERTY SITUATED IN TOWNSHIP OF MONTCLAIR, ESSEX COUNTY N.J.	CERTIFY TO: <div style="background-color: blue; width: 50px; height: 15px; margin: 5px auto;"></div>
RICHARD J. HINGOS INC. 539 VALLEY ROAD P.O. BOX 43752, MONTCLAIR, N.J. P: (973) 783-1114 E: RJHINGOS@COMCAST.NET			RICHARD J. HINGOS JR., PLS New Jersey License No. 43231	



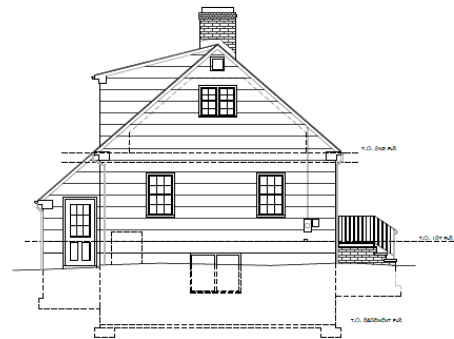
1. EXISTING EAST (FRONT) ELEVATION  
2023.10.10



2. EXISTING NORTH (RIGHT) ELEVATION  
2023.10.10



3. EXISTING WEST (REAR) ELEVATION  
2023.10.10



4. EXISTING SOUTH (LEFT) ELEVATION  
2023.10.10