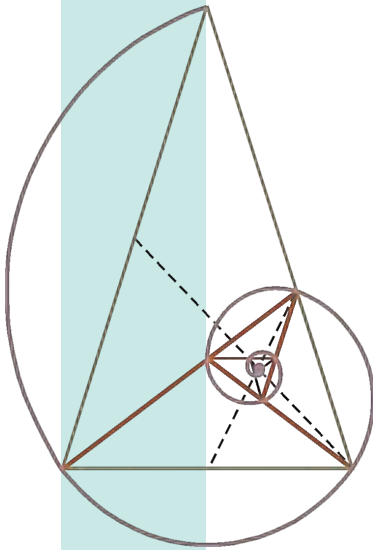


Lessons Learned

THE GREENWORKS ARCHITECTURAL DESIGN COMPETITION

SANTA FE, NEW MEXICO
JANUARY 23, 2009

A Collaboration of the City of Santa Fe,
the Frederick P. Rose Architectural Fellowship,
Enterprise Community Partners, and
Enterprise GreenCommunities



This booklet was written and edited by Alexandra G. Ladd, AICP from materials compiled from the jury's scoresheets, interviews with jury members and city staff, independent research, the contest submissions, and follow up comments from the contestants.

Design by Valerie Chelonis, City of Santa Fe
Graphics Section

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It should be noted that the scores awarded by the jury and comments by City staff regarding the desirability of any of the designs, or specific design elements presented in this booklet do not imply approval by the City of Santa Fe's development review process. Even winning designs may require modifications to obtain approvals.

REFLECTIONS ABOUT GREENWORKS

What does it matter that the City of Santa Fe made the decision to sponsor the GreenWORKS Design Competition? Why focus on historic preservation and green building? Why impose what are patently expensive requirements on affordable housing when the very point is to keep homes within reach of people with working and low incomes?

For starters, the audacity of the protocols contained in this Competition - be green, honor the vernacular, have transferrable qualities, and above all remain affordable not in a theoretical sense but as demonstrated in realistic project budgets - speaks volumes about the City of Santa Fe's deep grasp of the importance of parting company with the conventional ways of thinking about housing and affordability.

Second, the fact that the entries were so substantial in their responses - not just in their vision but, and more importantly in their grounding - speaks with equal vigor to the idea that if you set the bar high, you get great results. The City threw down something of a gauntlet.

"In addition to generating solutions to a hefty challenge, GreenWORKS also served to generate questions about City policies and regulations. Specifically, how well do they work to give us the kind of development we want - green, affordable and appropriate for our neighborhoods?" - Chris Calvert, GreenWORKS Juror

"As judges, it was important to all of us that the process of selecting the award recipients be as thoughtful and as disciplined as possible. Because of the special diversity of our group, we were able to share our individual perspectives and unique experiences to more fully accomplish the goals set out by the competition. It was a truly rewarding experience." - Lillian Montoya-Rael, GreenWORKS Juror

"The stringency of the green design criteria, the fact that the contest was for affordable housing, and the fact that it was a project in Santa Fe all contributed to the unusually high quality of the designs submitted. Usually, jurors can reject at least a quarter of entries in a contest of this sort right away because they don't meet the specifications. That didn't happen here, making our decisions much more difficult." - Mike Pyatok, GreenWORKS Juror

The design community did not shrink in the least. What resulted was a consensus by virtue of competition, a kind of variation on Amory Lovins' maxim that "if it exists it must be possible". We can do this.

Rather than back off from the enormity of the task - do it better and do it for less - both the City of Santa Fe and the architects and planners who entered the competition, rose to the challenge. The former by refusing to take the easy road and just build more boxes for poor people, the latter by showing how, through intent, expertise, and experimentation, affordable housing could be historically sensitive, environmentally sound, and materially responsive to the very real challenges faced by low-income families in a high cost market.

The GreenWORKS Design Competition is ultimately a statement by a collection of practical optimists -- from City staff to jurors to designers: "let's do better." Here's how. Your turn.

Charles Buki
GreenWORKS Juror
May 5, 2009

"The fact that the entries were so substantial in their responses... speaks with equal vigor to the idea that if you set the bar high, you get great results."

WHY GREENWORKS?

The fate of the subject site for the GreenWORKS Architectural Design Competition may have been to languish unnoticed in the scattered inventory of municipally owned lots, had neighbors not approached the City with an offer to purchase it. As the process was initiated, City Councilor Chris Calvert realized that the City would be wasting an opportunity to develop land – with no land cost – that was located near downtown and close to public transportation and community amenities. “It seemed the perfect place for building affordable housing. And the perfect time for making this housing ‘green’.”

Kathy McCormick, the City’s Director of Affordable Housing and Community Development took the idea one step further. “Rather than limit ourselves to one design procured through the public bidding process, my staff and I thought a design competition would really spur innovation. We also hoped to open up the design process to the community and make it fun.” The local office of Enterprise Community Partners jumped on board as a sponsor, bringing along two affiliates – Green Communities and the Rose Architectural Fellowship.

The program parameters were developed with feedback from an advisory group, composed of experts in building, architecture, energy efficiency, and financing. One clear objective for the competition was to combine the requirements of Santa Fe’s newly adopted Green Code, applicable to new residential development, and the Green Communities criteria, which would enable the project to be eligible for funding. The City wanted the development of this lot to be a model, replicable not only in other neighborhoods in Santa Fe, but also in other communities.

“I commend the city on requiring the extensive cost analysis as part of the submission. Many design competitions are mainly “ideas” competitions. While useful in progressing architectural innovation, it is helpful for designers to check their big idea against real world development scenarios. In our case, we did need to make changes along the way to reflect market realities and development costs.”

- Alexander Dzurec, autotroph Design Team

THE CHALLENGE

The resulting competition criteria called for designs that incorporate affordability and green building technologies, comply with historic preservation regulations, and reflect the values of the surrounding neighborhood. Furthermore, entrants were required to provide a cost estimate that demonstrated the financial feasibility of their designs including per square foot building cost and a cost/benefit analysis of energy savings.

The design criteria also stipulated that the entries adhere to the City’s Santa Fe Homes Program that requires 30% of the homes built are affordably-priced (max. of \$155,000 in this case). Furthermore, the designs must comply with the development regulations pertaining to the site, regarding setbacks, percentage of lot coverage, and open space.

The lot itself posed a challenge. The irregularly shaped site is small (10,910 square feet) and is bisected by a small, steep slope. The allowable density in the neighborhood is 21 homes per acre. At one quarter-acre in size, the subject site can accommodate five homes but six are possible with a density bonus awarded for providing affordably-priced homes. The allowable building footprint is approximately 4,300 square feet, with approximately 3,000 square feet reserved for setbacks from the lot lines. It is located in a historic district called Westside-Guadalupe and is subject to the City’s historic design regulations for that district.

THE RESPONSE

Twenty-four qualified entrants presented their designs. On January 23, 2009, a jury of seven – representing expertise in architecture, community development, police recruitment, economic development and greenbuilding – met all day and evaluated the entries. At the end of the day, the jurors chose to recognize the designs that best met the overall criteria. Two entries were chosen, submitted by: Opticos Design from Berkeley, CA; and WAMO/Needbased Inc./Homewise, a collaboration of three firms from Santa Fe, NM.

Honorable Mentions were awarded to five designers whose entries excelled in a particular category: Macy Architecture, San Francisco, CA; autotroph from Santa Fe, NM; Measured Works Architecture, New York, NY; RTKL Associates Dallas TX; and InterDesign, Indianapolis, IN. A public reception was held in the evening where votes were cast for the “Peoples’ Choice Award,” awarded to Verde Consultants from Santa Fe, NM.



WHAT'S NEXT?

According to Kathy McCormick, “The contest was not just a theoretical exercise – we hope to see this project built.” In the meantime, this book provides an opportunity to share the innovations and architectural elegance presented by these twenty-four designs and to learn from the comments, analysis and evaluation provided by the competition jury, City staff and the entrants themselves.

“Architects and architectural teams around the world are becoming more serious about designing affordable housing that is sustainable. When you ask architects to take seriously all the green issues, they have to be much more focused and technical, and it also forces them to think outside the box. So what you get is more exploratory, but also more rigorous and grounded.”

- Mike Pyatok, GreenWORKS Juror



“Competitions allow designers to get back to designing, creatively and thoughtfully. The intensity of a competition allows an idea to be studied, developed and laid out in short time frame, enabling designers to approach a project holistically. And in the end, competitions can bring many different, innovative solutions for the proposed problem.” - Opticos Design Team

ALTO STREET GREENWORKS DESIGN COMPETITION SITE

Site Map



Views of the site from the Santa Fe River, looking toward Alto Street.



Views of the site from Alto Street looking northward toward the Santa Fe River.

ENTRY 173

Firm Names: WAMO Studio,
Needbased Inc., Homewise
Team Members: Vahid Mojarrab,
Jonah Stanford
Location: Santa Fe, NM

This six-unit Territorial-style design, "Alto Compound," was selected by the jury as one of the two Best Overall winners in the competition. The award was based on the project's success in presenting a high quality, aesthetically pleasing, historically appropriate design that best met the overall criteria presented in the competition. The unit plans are sophisticated and realistically sized, each with a private courtyard. Common open space not only ties the compound together but also links it to the surrounding neighborhood by providing a corridor from Alto Street to the river. Each unit is provided two parking spaces and one unit is fully accessible.

The proposed design was distinct among the entries in that it was the only Territorial style building. Details typical of this style include: overhangs, balustrades, the light patterns on windows, and the painted wood trim. The project fits in appropriately to the neighborhood, providing some diversity to what is otherwise a predominantly Pueblo-style streetscape. A mix of stucco colors is also effective to break up the massing into room blocks and lends a contemporary flair to the design.

According to the project narrative, all of the buildings in the project achieve a Platinum Leadership in Energy and Environmental Design (LEED) rating and a Home Energy Rating System (HERS) score of 49 (51% energy savings over the conventionally built home). This accomplishment is based on a green building strategy that prioritizes: occupant

health and happiness; energy efficiency; and environmental footprint reduction. Some of the green features include: solar hot water; in-direct hot water storage; passive solar orientation to further increase energy efficiency and maximize occupant use of outdoor spaces; high efficiency insulation with 80% recycled content; no/low Volatile Organic Compounds (VOC) materials; day lighting; and energy efficient appliances.



In the statement of cost/benefit the designers explain a principle they call "innovation through simplification," whereby they advocate for investing in the shell of the structure in terms of durability and insulation to respond to heating and cooling demands. They believe this approach provides better returns than high efficiency and expensive systems to operate within the structure. For instance, the use of shared walls reduces the amount of exterior walls that are exposed to ambient air temperatures, (shrinking energy use by an additional 20-25%), while also lowering long term maintenance costs and initial construction costs.

The project was deemed highly practical and economical with a total project cost of slightly less than \$1 million and square foot costs averaging \$161. The designers propose four affordably-priced units, priced from \$126,000 to \$155,000 and two market units at \$350,000.

This six unit Territorial-style design, “Alto Compound,” was selected by the jury as one of the two Best Overall winners in the competition.

“Responding to the Greenworks criteria required the successful integration of relevant social and economic issues. I think that architecture that addresses singular client programming is no longer sufficient. A “successful” project is one that addresses far more than aesthetics or square footage and must respond to and respect the larger built, social and economic environment in which it resides. These new parameters are not limitations but rather opportunities to contribute to successful communities, not just isolated, successful projects.”

- Jonah Stanford, Needbased, Inc.

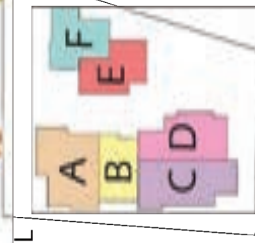
“Community input is an important part of any process that impacts the community’s built environment. Though the City of Santa Fe has the responsibility to act on behalf of the residents as a whole, it can also be responsive to or integrate the desires of community members more directly impacted by any given project.... Our strongest recommendation regarding community involvement is that it is integrated very early in the process.” - Excerpt from project narrative

“Our green building strategy stems from a philosophy of innovation through simplification. All possible gains should be made during a design process that understands the environmental and economic impact of its decisions regarding size, orientation, and configuration. The three dominant categories for the green building strategy are: occupant health, energy efficiency, and environmental footprint reduction.”

- Excerpt from project narrative



- 1 ENTRY
- 2 LIVING/DINING
- 3 KITCHEN
- 4 POWDER
- 5 COAT
- 6 BATHROOM
- 7 BEDROOM
- 8 MECHANICAL
- 9 WASHER/DRYER
- 10 SOLAR PANELS
- 11 BIKE RACK
- 12 DECK
- 13 TECH AREA



UPPER ALTO LEVEL
SCALE: 3/32"=1'-0"

- UNIT 'A': 2 BED / 1 BATH - 870 S.F. (ACCESSIBLE)
- UNIT 'B': 2 BED / 1.5 BATH - 925 S.F.
- UNIT 'C': 3 BED / 2 BATH - 1195 S.F.
- UNIT 'D': 2 BED / 1.5 BATH - 1015 S.F.
- UNIT 'E': 3 BED / 2 BATH - 1200 S.F.
- UNIT 'F': 2 BED / 1.5 BATH - 985 S.F.

The proposed design is a multiple family compound composed of six private residences ranging from small two bed room/ one bath units to larger three bedroom/ two bath units. The proposed design integrates one fully assessable unit and two parking spaces per residence. Integrated public open space is provided in a communal corridor that links Alto Street with the Santa Fe River and is fairly contained to facilitate children's outdoor activities and provide the possibility for communal childcare responsibilities. Along with the public open space each residence has private open space with great attention paid during the design process to allow for both private activities

process to allow for both private economies and social interaction. The proposed design is compliant with all land use and historic district zoning guidelines. All six residences have been designed to be LEED- Platinum certified by the United States Green Building Council and compliant with the proposed City of Santa Fe Green Building Code. The proposed design is intended to be respectful of the historic Alto streetscape and to contribute the City of Santa Fe as a whole



VIEW FROM LOWER ALTO



SITE SECTION
SCALE: 3/16"=1'-0"

ALTO COMPOUND

SANTA FE, NEW MEXICO

#173



VIEW FROM UPPER ALTO



1 VIEW UPPER ALTO



2 VIEW OF THE LOWER COURTYARD



SANTA FE RIVER

LOWER ALTO

3

2





UPPER ALTO

4

1

SITE PLAN
SCALE 1/8" = 1'-0"



4 VIEW FROM UPPER ALTO

LOWER ALTO STREET

#173

SANTA FE RIVER



3 VIEW FROM LOWER ALTO



ENTRY 14

Firm Name: Opticos Design, Inc.

Team Members: Jennifer Block, Christopher Janson, John Miki, Daniel Parolek, Karen Parolek, Stefan Pellegrini, Natasha Small, James Stanton

Location: Berkeley, CA

This design, "Santa Fe Courtyard Housing," was selected by the jury as one of the two Best Overall winners in the competition. The award was based on the project's success in presenting a high quality, aesthetically pleasing, historically appropriate design that best met the overall criteria presented in the competition. It achieves a high level of energy efficiency, uses economical and replicable green materials and building techniques and provides two affordably-priced units. Jurors were impressed with the efficient use of space and high quality amenities, particularly in the common space, and applauded the overall sophistication of the presentation.



The design of the six-unit complex is predicated on a network of four courtyards that reinforce a sense of community while providing passive heating and cooling and maximizing natural light. According to the project narrative, the courtyards act as outdoor living space and, "serve as points of entry, places for social gatherings, places for

respite and tranquility; spaces to expand the units and promote indoor-outdoor living..." This scheme also offers a community building with a shared kitchen, library, and event space.

The design offers many green features. Buildings are oriented to take advantage of prevailing breezes for passive cooling in the summer; units are one-room deep to maximize ventilation; thermal massing and "living" roofs help to keep the buildings cool in summer and warm in winter; ICF lumber and reclaimed materials (timber, wood, bricks, stone) are used wherever possible; and all interior finishes are made from low/no VOC and sustainable materials. The project also proposes on site energy production, with solar panels supplying 25% of the site's energy needs and passive solar orientation to further reduce energy consumption and costs.

Reviewers appreciated the flexibility of the floor plans and integration of pueblo design elements. The extruding vigas, the gate set in the wall, the exposed headers are all encouraged by the City's historic preservation regulation. The only question about the project's compliance concerned the stone facing of the community building.

This design is one of the more expensive to build, (\$2 million for total building cost; \$200/sq ft). However, this price estimate erroneously includes the price of the land. Combined with the flexibility of the floor plans and possible removal of the community room, jurors felt that costs could be brought down enough so that the project would be highly feasible to build.

This design, "Santa Fe Courtyard Housing," was selected by the jury as one of the two Best Overall winners in the competition.

"Our process begins by looking at the site and potential solutions at multiple scales, starting at the city and region, moving in closer to looking at the local and the neighborhood character of building types and styles, to the site specific topography and adjacencies and finally the selection of materials and finishes." - Excerpt from project narrative

"This courtyard housing design is green, affordable, and rooted in the history and culture of Santa Fe. It shows that affordability and good design can go hand in hand. We are excited about this design because it is an example of how well-designed density can play a role in the evolution of existing neighborhoods to meet the growing market demand for attached housing. This project also demonstrates how cities can rethink their zoning regulations such as parking requirements, setbacks, densities, and other elements that are often obstacles for projects similar to this and replace them with an approach based on reinforcing walkability, a specific, appropriate form, and building types endemic to a region." - Dan Parolek, Opticos Design Team

"The fundamental basis of sustainable design is a deep understanding of the site and allowing that to drive design decisions....these courtyard-housing units are each unique and are designed according to specific seasonal sun angles, prevailing winds, existing site grade, and other climatic data...." - Excerpt from project narrative

A PLACE TO CALL HOME NEIGHBORHOOD
 A MODEL GREEN INFILL PROJECT COMMUNITY SOLAR ORIENTATION
 RECLAIMED MATERIALS ENERGY EFFICIENCY ENDURING VALUE
 PASSIVE HEATING & COOLING COURTYARDS COOLING NORTH-SOUTH BREEZES
 SOLAR ENERGY ON SITE FOOD PRODUCTION RESOURCE EFFICIENCY
 LIVING ROOFS TO SUPPORT ENDANGERED SPECIES
 DROUGHT-TOLERANT NATIVE LANDSCAPING SPECIES RAINWATER COLLECTION



MAIN COURTYARD AND COMMUNITY BUILDING

Our healthy living design integrates a series of community building strategies to create a vibrant, green neighborhood. A community building program is used to encourage green building practices and create a vibrant, green neighborhood. The design strategy includes a variety of green building strategies, including a variety of green building strategies. The design strategy includes a variety of green building strategies, including a variety of green building strategies. The design strategy includes a variety of green building strategies, including a variety of green building strategies.

Landscaping features
water-resistant
materials to
reduce
water
consumption
and
allow
for
irrigation
savings
or
water
reuse.

A low Solar Panel
system provides up to
25% of energy needs.

Overhangs on southern elevations shield
high summer sun while allowing low winter
sun at the greatest heating.

Low-emissivity
windows
reduce
heat
loss
in
winter
and
heat
gain
in
summer.

Low-emissivity
windows
reduce
heat
loss
in
winter
and
heat
gain
in
summer.

Energy-efficient
lighting
reduces
energy
consumption
and
improves
indoor
air
quality.

Energy-efficient
lighting
reduces
energy
consumption
and
improves
indoor
air
quality.

Climate in
Pecos Site
Context

Shallow water ponds maintain
cool temperatures and evaporative
cooling.

Drought-tolerant
landscaping
reduces
water
consumption
and
improves
indoor
air
quality.

Shade
structures
reduce
heat
gain
and
improve
indoor
air
quality.

Energy-efficient
lighting
reduces
energy
consumption
and
improves
indoor
air
quality.

Planted southern exposure for passive
solar heating and winter north-south winds for
natural ventilation.

Drought-tolerant
landscaping
reduces
water
consumption
and
improves
indoor
air
quality.

Shade
structures
reduce
heat
gain
and
improve
indoor
air
quality.

NEW SCENARIO

ALTO STREET ELEVATION AND PARTIAL PLAN



CONCEPT AND MASSING DIAGRAM



ENTRY COURTYARD AND EDIBLE GARDEN



COURTYARD HOUSING SANTA FE, NEW MEXICO



LOWER ALTO STREET (BELOW)
31'



ALTO STREET
31'

SITE & UNIT PLANS

PROGRAM	
UNIT 1	2 BEDROOMS / 1 BATH 853 SF
UNIT 2	1 BEDROOM / 1 BATH 485 SF
UNIT 3	2 BEDROOMS / 1 BATH 1206 SF
UNIT 4	1 BEDROOM / 1 BATH 402 SF
UNIT 5	1 BEDROOM / 1 BATH 482 SF
UNIT 6	1 BEDROOM / 1 BATH 542 SF
UNIT 7	1 BEDROOM / 1 BATH 402 SF
COMMUNITY ROOM, KITCHEN, DINING ROOM & LIBRARY 808 SF	
PARKING 9 SPACES	
OPEN SPACE 3,193 SF	

LOWER ALTO STREET
31'



8" CONCRETE ICF WALL

**BUILDING A
LIVING ROOF**

LAYERS OF THE
LIVING ROOF
Indulgents Vegetables
6" Soil
Gravel
Root Barrier
Eggs/Insulation
New Berms
2" Expanded Polystyrene
Insulation
Permeation-Stop Tape
Drainage
Driped
Vegetation

**LIVING ROOF
PLANT LIST**

Blue Corn
(Shade Tolerant)
Coral Flower
Lamb's Ears
Dwarf Hydrangea
Blackberry
Strawberry
Echinacea

Additional ground
dwelling vegetation to be
installed on the living roof
to provide shade and
reduce water evaporation
from the roof surface.
Additional ground
dwelling vegetation to be
installed on the living roof
to provide shade and
reduce water evaporation
from the roof surface.

**GREEN
CONSTRUCTION**
ICF Construction provides

WINTER SUN ANGLE
SUMMER SUN ANGLE





GreenWORKS PRINCIPLES

PLAN AND LOT DEVELOPMENT

The fundamental form of sustainable design is a deep understanding of the site how to respond to the characteristics and performance impacts. Once a target site and climate is established, design decisions are driven by solar orientation, daylighting, passive cooling, and maximum ventilation. Clear planning is essential, services and transit, ideally within a 1/4 mile, encourage residents to walk, promoting a healthier lifestyle.

RESOURCE EFFICIENCY

Efficient floor plans make use of space while reducing the materials needed. lowering the peak occupancy energy loads. Passive systems for heating and cooling along with solar energy collection greatly reduce energy needs. LEED construction creates high R-value and supports low maintenance and long-life buildings. Mechanical systems for water and reclaimed water and ducts for apartments, courtyards and exterior walls add to the sustainability while giving the plant a sense of sustainability.

ENERGY EFFICIENCY

One creates floor plans with operable windows and skylights with provides opportunities for daylighting and passive cooling through cross ventilation. Solar orientation maximum passive heating with southern orientation where summer sun angles are tracked with shading devices and appropriately located landscaping that still allows low winter sun angles to give heat. Heating equipment should be well insulated and setback from direct sunlight while trees, landscaping and courtyards and site or shade, PV panels and being made greatly reduce energy needs and reduce the heat island effect of the City. Thermal mass of the roof prevents buildings with temperature causing lower interior temperatures.

WATER EFFICIENCY

Permeable surfaces and planting of plants and courtyards and reduces the City's urban stormwater load by allowing water to enter the City's system. The use of swales and filtering vegetation also supports stormwater retention. Water is collected from non-potable roof surfaces and is collected from rain chains into large pots where it can be used for watering the edible garden.

SUSTAINABLE PRACTICES

Courtyards and shared amenities, such as the community building, restaurants and beauty rooms, promote a strong sense of community and ownership. Residents have jobs in their home that encourage a shared responsibility for maintenance and safety. Outdoor living spaces with landscapes and edible gardens promote healthy lifestyles and recreational programs for gardening, recycling, and water conservation.

INDOOR ENVIRONMENTAL QUALITY

Energy and water conserving appliances and fixtures • On-demand water heaters • Radiant heating Passive cooling and heating • Low VOC paints, materials, and furnishings • Recycled materials • Recycle



COURTYARD HOUSING

SANTA FE, NEW MEXICO



ENTRY 147

Firm Name: Verde Consultants

Team Members: Jay Bush, Jennifer Faust, W. Robert Kreger AIA, Steve Oles, Johnny Rehders, Estevan Trujillo

Location: Santa Fe, NM

This design, focused on “low carbon footprint strategies,” won the Peoples’ Choice Award through a public vote during the GreenWorks reception. It was lauded by reviewers for its green features and the way it steps attractively down the site. Its varied stucco colors give the illusion that the structures were not built all at once, but rather evolved over time as is typical of much of Santa Fe’s historical architecture. A public pathway called “Paso Alto” is planned for linking Alto Street with the Santa Fe River and the Alameda River Park.

The design meets Leadership in Energy and Environmental Design (LEED) Platinum standards. It proposes Optimum Value Engineering (OVE) framing, the use of agrifiber board and salvaged wood for framing and casework when appropriate. Other green features include: rain water catchment to provide 100% landscape watering; active solar hot water in-floor radiant heat; a highly insulated shell; permeable paving; preparation for eventual gray water system; and a high quality and realistic water and energy review.



The project proposes seven units, in excess of the density bonus allowed under the City’s land use code. The design would also require encroaching on the front setback in order to fit in the extra unit. While jurors applauded the efficiency of the extra density, the design would not be approved as such, given the City’s intent for the site to be developed within the standard requirements for the site. In other respects, the project was deemed highly practical.

The four affordably-priced units range in size from 867 to 1,059 square feet and are priced from \$100,500 to \$155,000. The three market rate units are from 1,014 to 1,374 square feet and range in price from \$532,350 to \$652,650. The cost estimate reflects per square foot building costs from \$116 - \$500 for a total project cost of \$1.5 million. The top price was considered potentially too expensive for current real estate market values in the neighborhood.



This design, focused on “low carbon footprint strategies,” won the Peoples’ Choice Award through a public vote during the GreenWorks reception.

“Given the competition’s challenging mandate for ‘affordable green’, [we] recognized that traditional expectations (custom finishes and stone countertops), even in the market rate units, become subordinate to low carbon footprint features.”

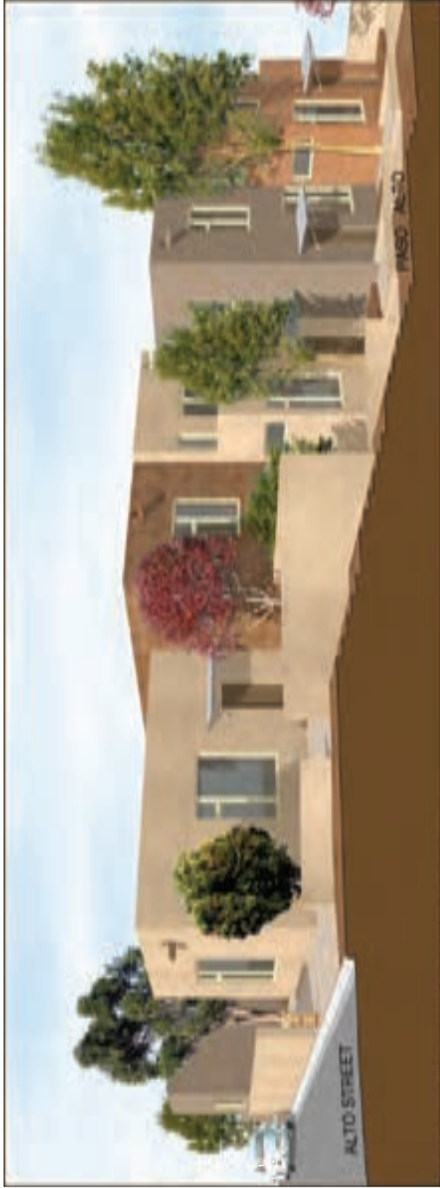
- Excerpt from project narrative

“By using common affordable residential building materials and systems in a ‘less brown’ (smarter) solution, [we] can demonstrate that a performance-driven design process can share space with historic design criteria...”

- Excerpt from project narrative

“Based on the Team’s collective experience with high-performance residential in and around Santa Fe, [we] guarantee a LEED for homes Platinum Preliminary rating with a HERS rating of 60 or less [40% energy savings] before any active solar applications... and ultimately to acquire a HERS rating of 30 or less [70% energy savings] after photovoltaic and solar-thermal applications. This supports the green revolution’s movement to redefine the word ‘value’ in real estate to include the word ‘sustainable’ before the word ‘value.’

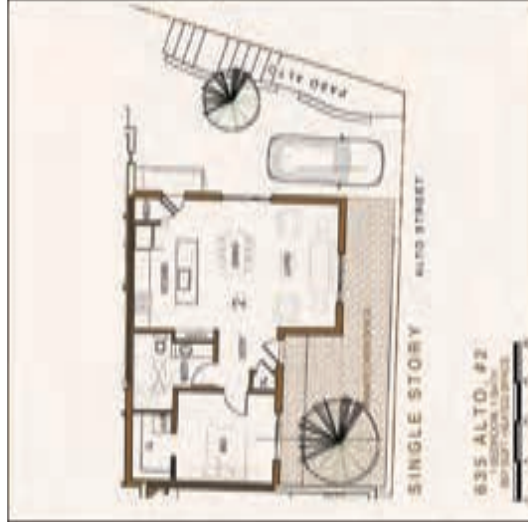
- Excerpt from project narrative



PERSPECTIVE LOOKING NW ON ALTO STREET

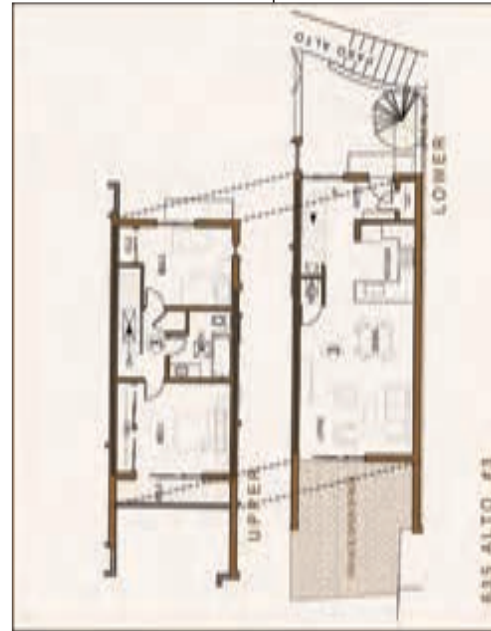
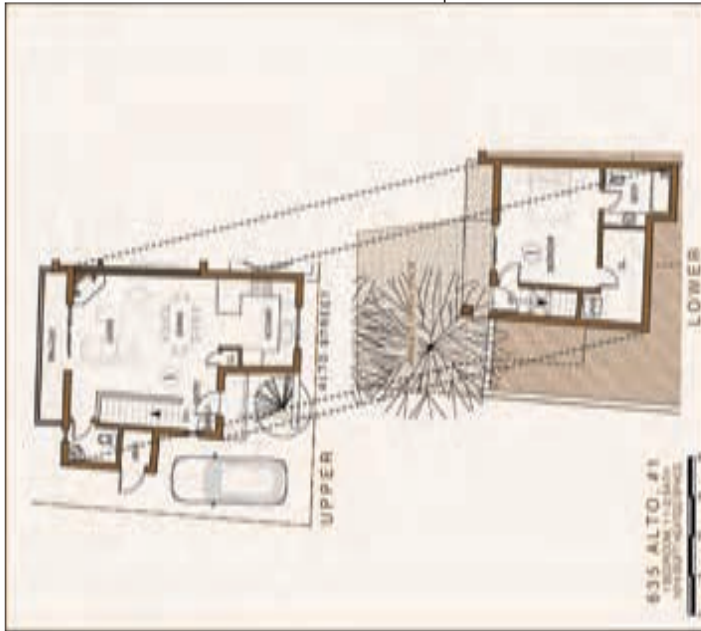


UNIT ONE
MARKET RATE



UNIT TWO
AFFORDABLE

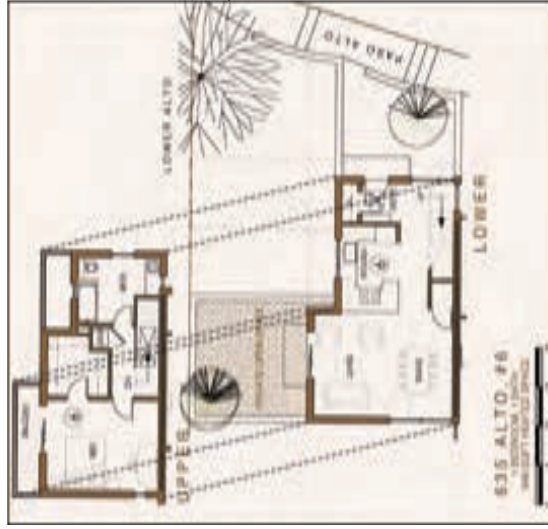
UNIT THREE
AFFORDABLE



UNIT FOUR
MARKET RATE



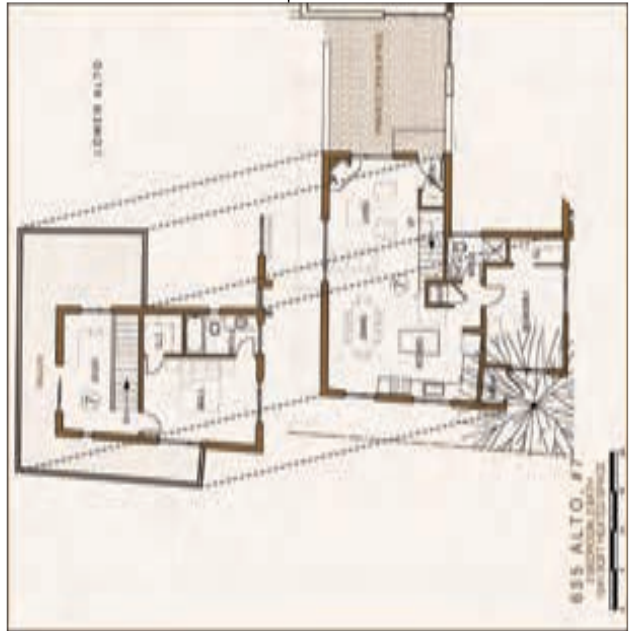
UNIT FIVE
AFFORDABLE



UNIT SIX
AFFORDABLE



UNIT SEVEN
MARKET RATE



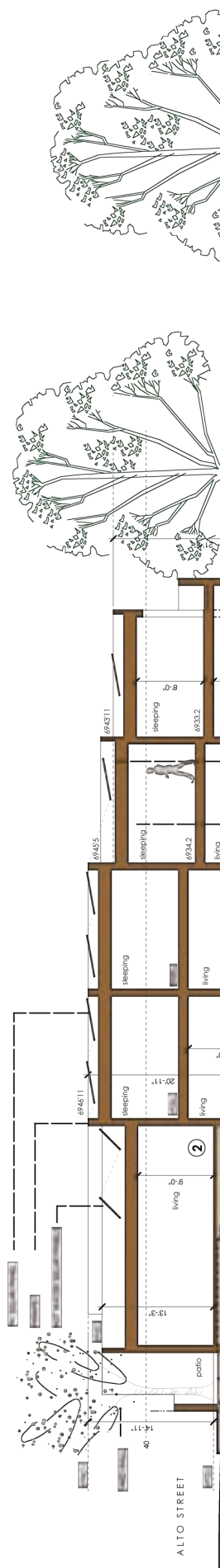


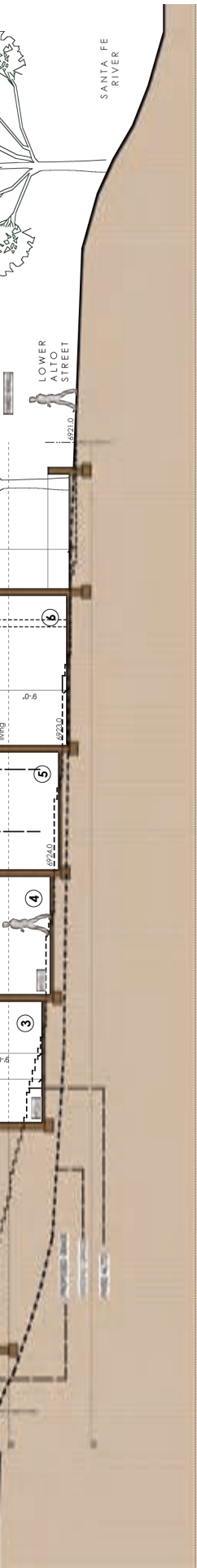
PERSPECTIVE LOOKING ACROSS RIVER FROM WEST ALAMEDA

SANTA RIVER

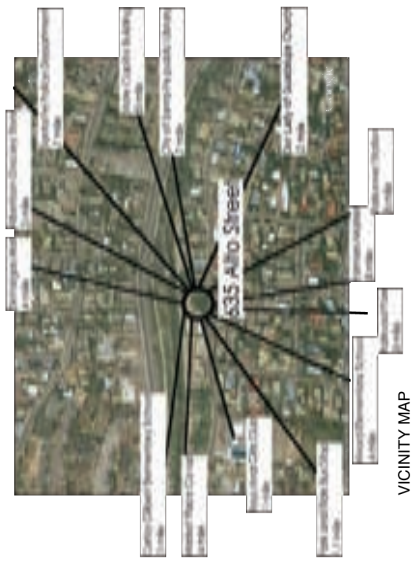


SITE PLAN





SITE SECTION



VICINITY MAP



PERSPECTIVE LOOKING AT PASO ALTO ON LOWER ALTO STREET



PUBLIC AND PRIVATE OPEN SPACES



PERSPECTIVE LOOKING SE FROM LOWER ALTO STREET