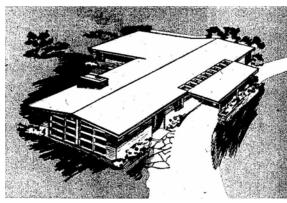
# POST-WORLD WAR II RESIDENTIAL SUBDIVISION DEVELOPMENT in TUCSON, ARIZONA 1945-1975

National Register of Historic Places Eligibility Assessment









# prepared by:

J. Chris Evans, Architect Modern Architecture Preservation Project

Jennifer M. Levstik City of Tucson Historic Preservation Office

R. Brooks Jeffery, Professor University of Arizona Heritage Conservation Program

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#### INTRODUCTION

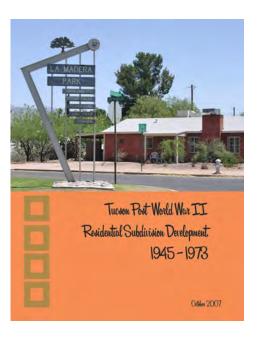
In 2012, the City of Tucson's Historic Preservation Office--in partnership with architect Chris Evans and the University of Arizona's Heritage Conservation Program--embarked on a three-year project to address the preservation issues surrounding the hundreds of single-family residential subdivisions built in Tucson during the mid-20th century. The vast number of post-World War II era subdivisions that would likely meet the National Register of Historic Places (NRHP) standards of eligibility for age and integrity posed a daunting urban planning challenge for the city. The primary goal of this project was to determine which subdivisions should be **prioritized** for listing on the National Register of Historic Places, in order to provide guidance to the City of Tucson in the allocation of preservation resources.

To achieve this goal, the research team performed the following:

- a preliminary evaluation of nearly 400 subdivisions that were platted or built in the mid-20th century
- a comprehensive survey of more than 240 subdivisions built between 1945 and 1975
- a context study on the evolution of post-World War II subdivision development in Tucson
- · evaluations of subdivisions on integrity, NRHP eligibility, and historic significance
- comparative evaluations of historic significance.

This research builds upon a 2007 city-sponsored historic context and survey by Akros, Inc. entitled "Tucson Post-World War II Residential Subdivision Development, 1945 - 1973." Together, these two documents provide a complete framework for evaluating the National Register of Historic Places eligibility of post-World War II neighborhoods, now and in the future.

This report and associated database will become a planning and management tool for the City of Tucson's Historic Preservation Office. It may also provide guidance to the Arizona State Historic Preservation Office (SHPO) and the Historic Sites Review Committee (HSRC), which are tasked with reviewing nominations to the National Register of Historic Places in Arizona. It will also be of value to Tucson-area neighborhoods seeking historic designation.



# METHODOLOGY Summary of Identification and Evaluation Methods

A. Establish Context for Evaluation

To establish a context for the identification and evaluation of relevant subdivisions, a literature review was undertaken at the beginning of the research project. This was done to develop a

general understanding of the themes of significance and character-defining features within the planning, architecture and landscape design of the era. This included a review of the Akros report, which consisted of a context study and preliminary survey of more than 300 subdivisions. The extensive data mapping in the Akros report was particularly valuable in revealing patterns of development in the post-World War II era. However, although the study provided substantial contextual information, the research team determined that the evaluation criteria and typologies identified in the report were insufficient and could not be applied to the development of a subdivision evaluation methodology.

The literature review also included a review of the context studies developed for post-World War II subdivisions in Tucson already listed on the National Register of Historic Places, including Winterhaven, San Rafael Estates, Indian Ridge, Catalina Vista, and Harold Bell Wright Estates. In addition, several documents focused on the post-World War II era and the Ranch style were also reviewed.

Although the scope of this research project only included subdivisions within the Tucson city limits, the research needed to consider development within the entire Tucson region to establish a broader perspective. So approximately a dozen subdivisions outside the city limits, known to the researchers to have potentially played a significant role in Tucson subdivision development, were reviewed for comparison purposes.

#### B. Identification of Relevant Subdivisions

The Akros report was the initial starting point for identifying relevant subdivisions. That survey included 304 subdivisions built between 1945 and 1973. However, review of the survey's methodology raised two issues. The Akros study had identified relevant subdivisions based on original plat date, and only included subdivisions that were first platted between 1945 and 1973. This had the unfortunate result of discounting a large number of subdivisions that were platted prior to 1945, but were built out during the period of significance.

A second concern was the period of significance identified in the Akros report. The year 1945 reflected the end of World War II and a clear shift in the development models in Tucson and elsewhere in the country. However, the conclusion of the period of significance in the Akros report had been identified as 1973, which was earlier than anticipated by the research team. After reviewing subdivisions that were platted after 1973, the research team determined that the period of significance should be extended. Residential design and subdivision development both underwent substantial changes in the late 1970s and early 1980s, but these changes did not substantially begin to occur in Tucson until after 1975. In addition, a handful of relevant subdivisions that were platted in 1974 and 1975 had build-out periods that extended into the late 1970s. As a result, the period of significance was extended to include subdivisions that were platted in 1975.

In the search for subdivisions relevant to the post-World War II era, the City of Tucson's GIS data resources were employed to identify all subdivisions that were platted or constructed

during the period of significance. More than 700 subdivision plats were reviewed for relevance. Some plats were combined into communities of interest, where appropriate (for instance, the Terra Del Sol subdivision had 15 separate plats). A substantial number were eliminated because they did not contain single-family detached housing, or were determined to be too small for consideration. This reduced the number of subdivisions to approximately 390.

An initial review of the 390 subdivisions was undertaken to identify and eliminate from consideration subdivisions that were obviously ineligible or that would clearly not rise to the level of priority status. Subdivisions were eliminated because they failed to demonstrate: integrity, cohesiveness, a defined build-out period within the period of significance, or potential for significance in design. This initial review was completed using Google aerials, Google street views, windshield surveys, and City of Tucson GIS data. This substantially reduced the number of subdivisions to be surveyed to approximately 240.

#### C. Data Collection

Data collection for these 240 subdivisions was completed using a combination of GIS data sets, archival research, and field surveys. Substantial information regarding the broad physical characteristics of each subdivision was available through the GIS resources of the City of Tucson.

Data fields were established to identify categories of information necessary to determine significance and eligibility. Prior to data collection, data entry conventions were established to allow for ease of data entry, subsequent database analysis, and for future database queries. After an initial survey period on selected subdivisions, original assumptions about relevant development features were re-evaluated and data fields were revised. In a valuable feedback loop, data fields and data entry conventions continued to evolve based on new information revealed in subsequent survey work.

The information collected for each subdivision included:

- statistical data on the number of lots, average lot size, and average square footage of houses;
- historical information on the dates of development, original selling prices, significant
  participants (including developer, survey engineer, architect, builder, and landscape
  architect), and contemporary recognition (including publications and awards); and
- descriptions of the defining physical characteristics, including street layout, building style, building forms, construction materials, landscape type and neighborhood amenities.

In all, there were nearly 40 distinct data fields.

As part of a service learning and community outreach component within the University of Arizona's Heritage Conservation Program, students enrolled in the course *Documentation and Interpretation of the Historic Built Environment* (ARC 497j/597j--College of Architecture, Planning and Landscape Architecture) in the Spring semesters of 2013 and 2014 were engaged to provide field surveys and archival research for the project. Within the content of the

coursework, students were provided extensive background on mid-20th century subdivision development, and instruction on field surveying and archival research. Students were involved in the research of approximately 40% of the subdivisions. All student work was reviewed for accuracy by the project team leaders (Evans, Jeffery, Levstik). The architectural office of Chris Evans provided data collection, including field surveys and archival research, for the remaining subdivisions. All collected information was compiled into a comprehensive database.

# D. Data Analysis and Criteria for Evaluation

An analysis of the subdivision database was undertaken to develop the criteria necessary to identify high-priority neighborhoods. Review and analysis of the database sought to identify: the evolution of subdivision development, patterns of development, significant milestones, and significant participants (people and organizations). A context study entitled "The Evolution of Post-World War II Residential Subdivision Design and Development in Tucson, Arizona 1945-1975" was written to interpret and explain the data that was collected. The criteria for evaluating significance primarily focused on identifying early, exceptional, innovative, and distinctive examples of the themes identified in the context study.

The entire text of the context study is included in a subsequent section within this report; what follows is a summary abstract of the patterns of development identified in the context:

#### Overview

The most significant residential subdivision development occurred in the first 15-20 years after World War II. The earliest work in this phase tended to be groundbreaking, setting the stage for future development. After 10 years developers began to hit their stride, developing fully conceived communities. During the 1950s, the scale of projects grew as developers continued to evolve to compete in the marketplace. There was far less significance in the last 10-15 years of the period, as builders and developers continued many of the same patterns of development, and yet were, generally speaking, making smaller investments in design, amenities, and landscaping, in favor of volume, price and location. After 1970, several large local builders were bought out by national companies, which continued to shift the focus of development away from design quality or innovation.

There were 3 primary areas of significance: subdivision planning, architecture and landscape design.

# Planning

Innovation in subdivision planning started with the introduction of more picturesque design layouts to middle and lower priced housing projects; this was largely done through the use of curvilinear and discontinuous streets, garden city concepts and landscaping features. There was also an effort to create cohesive and inward-focused neighborhoods through the plan design.

In the 1950s, subdivision planning continued to evolve with the introduction of amenities to attract home buyers, and toward larger scale projects. As the projects grew larger, more ambitious amenities were achieved in master planned communities.

By 1960, the model for subdivision planning had achieved its apex; but after the onset of a significant economic slump during the early 1960s, planning became static and in some respects began to devolve. In the last ten years of the period there was almost no evolution or innovation in planning.

#### Architecture

Residential design in the immediate post-war period reflected the influence of the Ranch style and Modernism; in the 1940s this resulted in 3 primary building forms: Ranch, Transitional Ranch, and Modern Ranch. Transitional Ranch lost favor in the early 1950s, and the Ranch style became the dominant style in single family housing. The Modern Ranch continued to be used, but was far more limited. During the course of the 1950s, regional influences began to shape the Ranch and Modern Ranch designs.

There were thematic variations on the Ranch style introduced in the 1940s and 1950s, but these were rare and typically limited to custom homes; more exploration of thematic variations started in the late 1950s and early 1960s. By the late 1960s, the Territorial Ranch became the primary thematic variation and one of the most common building types. The Ranch continued to be the primary building form in the 1960s. Variations on the Modern Ranch continued as a small percentage of total production, but the form nearly disappeared after the mid- to late-1960s.

A significant economic downturn in the early 1960s caused builders to re-evaluate how they would attract homebuyers. The focus for several large builders was on volume and competitive pricing rather than investment in design; with just a few exceptions, there was little evolution or innovation in production housing from 1965 to 1975.

Significant milestones in the evolution of architectural design during the period included:

- 1. introduction of burnt adobe for production housing: burnt adobe should be seen as a particularly significant character-defining feature because of its distinction to Tucson;
- 2. introduction of the low-slope gable roof: the low-slope gable roof is a distinctive characteristic of the Tucson version of the Ranch style;
- 3. introduction of slump block construction for production housing;
- 4. introduction of the Territorial Ranch style.

#### Landscape Design

Most production housing landscapes during the first 20 years of the post-World War II period were characterized by Mediterranean-influenced plantings. Lawns were commonplace, but not ubiquitous. In a few subdivisions, there was some integration of Mediterranean and Sonoran influences.

A few subdivisions during the post-war period were characterized by landscapes incorporating existing native desert vegetation that was located on the property prior to development.

In the late 1960s and 1970s, landscape design for production housing projects was practically non-existent. In the mid- to late 1960s, the city's use of and relationship to water changed dramatically toward conservation and reducing costs. This shift, combined with the shift in the business model of developers in the wake of the economic slump of the early 1960s, resulted in most front yard landscapes being defined by minimal investment, low maintenance, and typically being characterized by decorative gravel ground cover and few ornamental plants.

(Note: archival research for this context and the associated survey includes the analysis of both primary and secondary sources of information. A comprehensive list of secondary sources can be found in the "Major Bibliographic References" section of this document. However, much of this research reflects the review and synthesis of hundreds of primary sources from archival collections, including contemporary newspaper articles, advertisements and promotional pamphlets, that are not specifically cited. These archival collections and their locations are also identified in the bibliography.)

# E. Identify Priority Neighborhoods

# Significance

Evaluations of significance were based on the subdivision's relationship to the themes of significance identified in the historic contexts, in accordance with guidelines established by the National Register of Historic Places. The following rating system was used to evaluate significance:

- 1 no historic value
- 2 baseline, representative of the period
- 3 distinction of architecture, planning or landscape
- 4 particular distinction, or cohesive in all areas, or early example
- groundbreaking, or exceptional, or significant in 2 or 3 areas (architecture, landscape, planning), or regional and/or national significance

# Integrity

The evaluation of integrity was based on a subdivision's retention of character-defining features and ability to convey its historic significance, in accordance with guidelines established by the National Register of Historic Places. The following rating system was used to evaluate integrity:

- 1 low
- 2 medium
- 3 high

Subdivisions with a score of 1 are unlikely to have sufficient integrity to be eligible for listing on the National Register of Historic Places; subdivisions with a score of 2 are likely to retain sufficient integrity to be eligible for listing; subdivisions with a score of 3 are very likely to have sufficient integrity to be eligible for listing. These integrity evaluations reflect subdivision conditions in 2013-15.

In the evaluation of subdivision integrity, two significant patterns emerged. First, the integrity of landscape design in many subdivisions developed before 1965 has been compromised; this is a problem particularly related to Tucson, because the city's use of and relationship to water has changed dramatically since most of these subdivisions were built. In an effort to conserve water and reduce costs, most water-intensive landscapes have been replaced. This is especially true in low income neighborhoods, where the cost to maintain the original water-intensive landscapes can be prohibitive. Second, the integrity of lower cost housing, particularly those subdivisions built before 1965 and especially in south Tucson, has typically been compromised; this is a result of the small size of these houses that no longer meet the needs of owners, and a

cultural tradition of homeowners modifying their own homes and erecting perimeter walls and fencing around the front of the property. This scarcity of historic integrity found in subdivisions of low-cost housing (in both landscape and architecture), combined with the limited original investment made by developers, severely limits the number of these subdivisions that can be identified as significant and eligible. (Note: significance that may have emerged subsequent to the primary period of development--e.g. significance residents, post-buildout socio-cultural identity--was generally beyond the scope of this project.)

# THE EVOLUTION OF POST-WORLD WAR II RESIDENTIAL SUBDIVISION DESIGN AND DEVELOPMENT IN TUCSON, ARIZONA 1945-1975

# 1940s

#### Overview

In the years immediately following World War II there was an incredible demand for housing in Tucson, as in the rest of the United States. There had been very little residential construction between the start of the Great Depression and the end of the war and veterans returned to find a serious housing shortage. In addition to the pent up demand, Tucson also saw incredible population growth in the post-war years. Tucson's sunny climate was the primary draw for veterans and others, and particularly for people seeking respite from the severe winters of the upper midwest. Like many cities in the southwest, the Tucson region grew dramatically after World War II from a population of less than 70,000 in 1940 to more than 250,000 in 1960.

To meet the demand, government housing programs and new financing options were introduced to make home ownership more accessible. Traditionally, financing for home ownership had followed a tight mortgage policy, with sizable down payments and short repayment periods, but the Federal Housing Administration (FHA) began insuring loans with more favorable terms and promoting single-family home construction, which pushed development into suburban areas.

The production housing industry emerged and expanded to accommodate the demand for single-family housing, and from 1945-1975 more than 50,000 houses were built in Tucson. FHA financing and high demand incentivized standardized design and mass production. The need for fast-paced production models and the escalation of the commercial housing sector resulted in suburban development patterns with a limited range of expression; the economy of scale informed design. The rise in automobile ownership helped to accommodate and foster these sprawling developments as housing moved further from downtown.

Because of the geography of the Tucson basin the city primarily expanded eastward, although there was expansion to the south as well. Expansion to the east provided easy access into the downtown business district via Broadway Boulevard. Subdivisions built as part of the city's southward expansion were generally more affordable than those that were built as part of the eastward expansion, and were often targeted to employees of the military and aerospace industrial facilities adjacent to the airport south of town.

There were no models for large scale production housing to address the pressing demand except military housing; a few contractors that had built military facilities during the war translated that experience into developing subdivisions of single-family housing, and were among the first production builders in Tucson. Most homebuilders were local companies, but large companies from Phoenix and California also built in Tucson in the early post-war years. Production homebuilders usually hired architects to design model homes that they would market to prospective buyers.

# Post-War Planning Concepts

Most subdivisions that were platted before the war were an extension of the city's rectilinear street grid. In contrast, most post-war subdivision planning embraced modern planning concepts that had emerged in the late 19th and early 20th century from the Garden City and City Beautiful theories that focused on creating picturesque environments reminiscent of an idealized image of country living. These ideas had first been introduced to some of Tucson's more affluent subdivisions in the late 1920s and 1930s, and provided a clear distinction to the paved monotony of the urban grid.

Innovation in subdivision planning started with the introduction of these picturesque design layouts to middle and lower priced housing projects. This was largely done through the use of curvilinear streets and landscaping features. To address issues associated with the emergence of the automobile in American suburban living, the FHA developed guidelines to minimize pass-thru traffic, traffic speed and noise within neighborhoods; recommendations included curvilinear and discontinuous streets, cul-de-sacs, the elimination of 4-way stops, and limited entry points into each neighborhood. Discontinuous streets and limited access points also helped to create cohesive and inward-focused communities and establish neighborhood identity. The FHA embraced and promoted these ideas to create safer and more attractive environments.

The first two post-war subdivisions to implement these modern planning concepts were Broadmoor and Frontier Village.

The Broadmoor subdivision was platted in 1944 and the developers immediately began advertising lots for sale in anticipation of the end of the war. The planning was characterized by curvilinear and discontinuous streets, limited access via formalized entry points, and landscaping features at entries and along the drainage way that bisected the subdivision. The plat provided zoning for higher density housing and commercial development along the major streets at the perimeter of the subdivision. Broadmoor also had a neighborhood theme, with streets named for English cities. Lots were sold to individuals and to small builders. Home construction began in late 1945 (after the war moratorium on construction had been lifted) and continued into the 1950s, and most of the more than 360 mid-priced custom and builder spec homes were built in the Ranch style (see "Building Forms and Materials" below).

Frontier Village was the first large scale production housing development in Tucson, and was also likely the first to receive FHA financing approval. Located approximately 5 miles northeast of downtown, the project included nearly 200 houses and a commercial shopping center. Construction started at the end of 1945. Although Frontier Village reflected some of the modern planning concepts, the planning was not as sophisticated as it was at Broadmoor--streets, though curved, were continuous, and there were more than a dozen entry points into the neighborhood. The houses were built in a Transitional Ranch style (see below). Landscaping was provided by the developer, and included options for lawns, trees and shrubs.

Developers like those at Frontier Village provided commercial developments as an amenity to attract potential homebuyers. Homeowners wanted to have shopping and other services nearby; this was especially true as subdivisions moved further from the city and away from city services.

Subdivisions such as Miramonte-La Madera and Alvernon Addition were some of the earliest post-war subdivisions to extend the concept of amenities to include recreational facilities, such as neighborhood parks (although Catalina Vista and San Clemente had both included parks in more affluent developments platted prior to the war).

#### Building Forms and Materials

Residential design in the immediate post-war period reflected the influence of the Ranch style and Modernism; in the 1940s this resulted in 3 primary building forms: Ranch, Transitional Ranch, and Modern Ranch.

The Ranch style had first emerged in California in the 1930s and evolved from a romanticized image of the historic ranch houses and haciendas of the west. This image grew into an idea of western living that was characterized by simple, low-profile building forms on wide lots, with gable or hip roofs, traditional materials, and outdoor living spaces. The Ranch concept also addressed significant issues that usually went overlooked in pre-existing styles, including functional planning, informal living, privacy, daylight and ventilation. The popularity of the Ranch can also be traced to its lower construction costs, reduced construction times and FHA incentives that favored simple building systems. The simple forms and unadorned surfaces were in contrast to the picturesque forms, elaborate details, ornamental features and laborintensive construction (requiring skilled craftsmen) of period revival and craftsman styles. This made Ranch houses an affordable choice for an expanding middle class. The rise in automobile ownership resulted in attached and integrated carports in most developments.

The Transitional Ranch evolved as aspects of the Ranch style were interpreted in the context of more traditional residential forms in Tucson, such as the bungalow, and a focus on cost-effective housing in the wake of the Great Depression. In some respects, the houses were a hybridization and simplification of forms, and were typically stripped of unnecessary adornment. The houses were small and typically had a simple square or slightly rectangular plan. The masonry houses were covered by medium-pitched gable or hip roofs with minimal or no overhanging eaves. Wood siding was often used as a secondary material on gable ends. The houses had detached garages or carports, or no car storage at all.

A small percentage of post war housing was shaped by the concepts of the Modern Movement in architecture. The Modern Movement evolved independently from the Ranch style, and had emerged in the first half of the 20th century out of the work of Frank Lloyd Wright and several European architects. It was "an artistic and architectural movement that embodied the unique early 20th century notion that artistic works must look forward to the future without overt references to historical precedents. Modern design emphasized expression of functional, technical or spatial properties rather than reliance on decoration." (docomomo-us.org)

Although Modern architecture and the Ranch house had evolved and developed independently, they shared fundamental values about living in the 20<sup>th</sup> century: the houses were functional and eschewed pretense, emphasized access to daylight and ventilation, and embraced outdoor living in the mild southwestern climate. As a result, there was a great deal of cross-fertilization between the two movements. By the late 1940s designers had created a hybrid of the two, and

the Modern Ranch was born. Modern residential architecture had limited appeal in its purest forms but was more widely accepted when Modern concepts were integrated with more traditional Ranch forms and materials.

Tucson's Modern Ranch houses were characterized by asymmetrical forms, dynamic spaces, functional planning, innovative materials and technologies, flat, shed or low-slope gable roofs, large window walls that often reinforced indoor-outdoor living, and an absence of ornamentation.

The primary wall construction materials in the 1940s included painted concrete masonry, brick, and to a lesser extent wood frame and sheathing. Roof forms included flat, shed, gable and hip roofs. Roof materials for gable and hip roofs were typically asphalt shingles, while built-up roofing was used for flat or low-slope roofs. Most built-up roofs had a decorative gravel top layer embedded into the asphalt that reduced UV exposure and, in the case of white marble, reflected sunlight and reduced heat gain. Tile roofs, though uncommon, were also used.

Most operable windows in the 1940s and early 1950s were steel casement type windows with divided lights. These were often integrated with steel frames for fixed window panels. In houses reflecting a Modern influence and in some Ranch houses, large fixed windows were often custom fabricated in wood.

# Veterans Housing

Two of the earliest developments in Tucson were built specifically for veterans: the Tucson Heights project and Sundt Construction's homes in Country Club Manor. These projects were small in scale, consisted of less than 100 houses, and were built within existing subdivisions. Both projects focused on affordability and the speed of construction.

The Tucson Heights project, built by the Great Western Construction Company in 1946-47, evolved out of a public campaign focused on the need to provide affordable housing for the influx of returning veterans. The project was lauded nationally as one of the earliest examples of veterans housing in the country. Architects Blanton and Cole designed four floor plans for the project and offered several elevations for each plan. The small Modern houses were low-profile compositions of simple rectangular forms and planes, flat or low-slope roofs, large windows and window walls, and concrete masonry walls that were painted white. Homeowners were responsible for landscaping, though there were cooperative efforts among the residents. Although more than 300 veterans applied for houses in Tucson Heights, less than 100 houses were built, as rising construction costs impeded the contractor's ability to produce the houses for the original sales price.

M. M. Sundt Construction built 100 houses in the Country Club Manor subdivision in 1947. These houses were designed by Arthur Brown, one of Tucson's best known architects of the period. To expedite the construction process, the houses were all variations on a single floor plan. Brown designed the plan so that it could be rotated on site to provide four alternative street elevations; by mirroring the plan there were a total of eight possible elevations. This had the additional benefit of avoiding the appearance of repetition that was a primary drawback of mass

produced housing. The Modern Ranch houses were characterized by brick construction, flat and low-slope gable roofs, large windows, attached carports and a systematic 'kit of parts' method of construction. Again, homeowners were responsible for landscaping.

Like many of the earliest housing developments in the mid-late 1940s, both Tucson Heights and the Sundt project were built within existing subdivisions that had been platted before the war and were an extension of the city's rectilinear street grid.

#### Pueblo Gardens

A milestone in Tucson's post-war growth was the creation of Pueblo Gardens. In the summer of 1948, Del Webb opened the highly publicized development southeast of downtown. Webb was a California developer and had been a military contractor during the war. Perhaps ten years ahead of its time, Pueblo Gardens was envisioned as Tucson's first master-planned community, with a park, schools, churches and a shopping center. The development was significantly larger than anything that had previously been built in Tucson, and was intended to include 3000 low-cost houses. Architects A. Quincy Jones and Paul Williams designed the subdivision, houses and landscaping. Jones was the primary designer and implemented concepts that would later evolve and emerge more fully in his work for California developer Joseph Eichler, one of the country's leading builders of Modern production housing.

The subdivision planning included curvilinear and discontinuous streets, but also introduced the use of collector streets. The siting and orientation of houses was specific to each lot, and was shaped in part by landscape design concepts for the entire development. Landscape was conceived as a neighborhood-wide amenity--the neighborhood was envisioned as being situated within a park (hence the name), and landscaping was to be continuous from property to property. Rolled curbs provided great flexibility in the location of the driveways on the site.

The Pueblo Gardens houses were wood frame construction with redwood siding or stucco, and had open floor plans, floor-to-ceiling windows, and shed or gable roofs. The houses reflected the influence of both the Ranch style and Modernism. Webb developed innovative construction methods to produce unprecedented volume in a very short period of time.

Sales did not meet expectations in Pueblo Gardens--perhaps because of a local recession or because the minimally insulated wood framed homes with extensive glass had not been designed to account for the heat of the desert (advertisements tried to address this issue by comparing the houses to those in Imperial Valley, California)--and Webb abandoned the project and sold his interest in 1949 after only 500 houses had been sold and another 250 remained unoccupied.

# Custom Subdivisions

The Winterhaven subdivision, which was developed in 1949 by C. B. Richards and built out during the 1950s, promoted lush landscaping as a defining feature of the neighborhood. The subdivision was inspired by the expansive lawns and large trees found in the suburban residential landscapes of the midwest. Richards established a privately owned water company that was critical to achieving and maintaining the pastoral landscape. Guidelines on plant

selection helped to create a cohesive community character. The neighborhood was characterized by streets lined with Aleppo pines, lawns in front of every house and broadleaf shrubbery. More than 250 custom and spec houses were eventually built in the subdivision, primarily in the Ranch style.

Tucson Country Club was developed starting in 1948 on more than 500 acres of farm and ranch property. The golf course and subdivision were located on a triangular wedge of land situated at the confluence of the Tanque Verde and Pantano washes approximately 10 miles northeast of downtown. The intention was to create Tucson's premier high-end subdivision of custom homes and country club living. Access to the subdivision was controlled at a single entry point. Streets were curvilinear, discontinuous, and were named for the Spanish language titles of Catholic saints. The rambling houses were situated on large lots, and were built in a range of architectural styles--primarily variations on the ranch form--over a nearly 20 year period.

Wilshire Heights was another higher priced subdivision development that was started in 1948. The subdivision was defined by limited access points, curvilinear and discontinuous streets, 1/2 acre lots and a park. Like many subdivisions with larger lots, some native desert vegetation was retained, in addition to the primarily Mediterranean landscaping. There were more than 140 lots, and custom houses were built over a 15 year period in the Ranch and Modern Ranch styles.

#### Small Builders

At the other end of the scale, there were many small builders competing for business and trying to establish themselves in Tucson's emerging production housing industry in the immediate post-war period. In the late 1940s and early 1950s, subdivisions of custom, semi-custom and builder spec homes such as Poet's Corner, San Clemente, Broadmoor, Encanto Park and Winterhaven gave small homebuilders the opportunity to explore and develop design concepts for Ranch and Modern Ranch houses that they would apply later in larger production housing developments.

#### 1950s

# Subdivision Planning and Development

As Tucson's fledgling building industry gained its footing, homebuilders began to utilize more sophisticated business models for development. Three primary development models emerged, including 1) single builders developing an entire subdivision, 2) multiple builders within a single plat, and 3) developers offering lots for sale to small homebuilders or to individuals for custom homes.

Small builders and developers expanded as they gained experience, and the continued success of local builders eventually displaced the few out-of-town builders. By the mid-late 1950s, all of the largest homebuilders were local companies.

Tucson continued to expand eastward during the 1950s, though there was additional growth to the south as well. There were also occasional developments to the north and west. Higher priced developments tended to be located in the northeast, closer to views of the Santa Catalina

Mountains and away from the aircraft noise of Davis-Monthan Air Force Base. The city's eastward expansion had a leapfrog quality shaped in part by a requirement that plans for subdivisions located within three miles of a city's municipal boundary must be submitted to that city for review. This was in anticipation that the city would eventually annex the development. By developing properties beyond the three mile limit, subdivisions could be established and houses constructed with minimal regulatory oversight and would not be required to meet the City of Tucson's standards for zoning or building codes. This was a common practice in the Tucson home building industry.

Subdivision planning and design continued to evolve in response to FHA guidelines, and to attract homebuyers. Curvilinear and discontinuous streets became more common, and often included cul-de-sacs. Alleyways provided utility access and trash collection out of sight from the street. Lot dimensions also evolved to accommodate larger houses with a more elongated street facade.

Developers would also create neighborhood themes in the subdivision name, street names, signage and landscape features. The intention was to create a sense of identity for a neighborhood.

Subdivision plats grew larger as developers became more experienced and adept, and had more capital available for investment. The larger scale also provided developers with the opportunity to offer more elaborate amenities to attract buyers. The range of amenities grew more extensive over the course of the 1950s, and included parks, open space, landscape features, swimming pools, shopping centers, schools and churches.

Most developers continued to hire architects for the design of houses.

#### Building Forms and Materials

By the early 1950s, the Ranch was the dominant style in single-family housing. The Ranch form typically became more horizontal in character and the elongated form created the impression that the house was larger than it actually was. The Modern Ranch was also used, but was far less common. The Transitional Ranch disappeared after the early 1950s.

A variation on the Ranch and Modern Ranch forms implemented a transverse building orientation, where the long axis of the house and the ridge line of the roof were set perpendicular to the street. These houses were typically covered by a low-profile gable roof. The transverse orientation combined with a low roof slope (1:12 to 2:12) limited the visibility of the roof surface from the street.

In general, houses grew larger during the 1950s. Attached carports were standard, but varied between one or two parking spaces. By the end of the decade, most mid-priced houses had spaces for two cars as homebuyers transitioned into two car families.

Wall construction materials that were common during the 1950s included painted concrete masonry, brick and burnt adobe. A few builders used decorative concrete masonry. In some

cases, mortar-wash was applied to brick and burnt adobe to create a more rustic, aged patina to these materials. Painted concrete masonry was primarily associated with lower priced housing.

Starting in the early 1950s, burnt adobe became the predominant wall construction material for mid-priced tract housing and custom homes in Tucson. In contrast to traditional sun-dried adobe, burnt adobe acquires additional material properties as a result of the application of firing, including reduced moisture infiltration, greater cohesive stability and ease of handling. The appearance is similar in size and shape to traditional adobe, but the color is usually distinct; most of the burnt adobe used in Tucson was brick red or rust orange. The color similarity to brick provided homebuyers a material that was familiar but also had a distinctive southwestern character. Exposed burnt adobe was rarely used in the United States outside of southern Arizona, likely because the primary production centers were located in northern Mexico and transportation costs limited the material's economic viability beyond a certain range.

Around 1953, the Tucson Home Builders Association came to an agreement that members would only use masonry for wall construction. This was based in a belief that masonry would provide a minimum standard of quality. This agreement may have also been in response to issues at Pueblo Gardens, where there had been concerns about the appropriateness of the thermal envelope provided by wood frame construction. It may have also been motivated by concerns that large out-of-town construction companies would enter the local housing market offering a lower-priced product by featuring wood frame construction, as Del Webb did at Pueblo Gardens.

Gable roofs were the dominant roof form, but hip roofs were also common. The most common roofing materials were asphalt shingles and built-up roofs. Many built-up roofs included decorative gravel.

Production builders began to transition to low profile gable roofs in the early 1950s. The gable roof was common for the ranch house across the country, but the low-slope gable was most appropriate in locations like Tucson with limited precipitation and no possibility of snow accumulation. The low-slope of the gable roof (1:12 to 2:12) reduced the visibility of the roof surface and minimized its impact on the appearance of the house. The limited visibility of the roof allowed builders to install a built-up roof that was generally less expensive than other roofing materials. The lower slope also reduced the height of the roof, which helped to limit the impact the roof had on mountain views for neighboring properties, which were an important selling point. The low profile and the expressed roofline also helped to emphasize the horizontal character of the house.

In the 1950s, steel fixed and casement windows were still the most common window types, but builders transitioned to using steel frames without divided lights. Builders also continued to use custom wood fixed windows for large windows and window walls. In the mid-1950s, aluminum horizontal sliding windows were introduced as a lower-cost alternative to steel.

Landscape Design

In the first 20 years of the post-war period, most builders and developers provided landscaping as an amenity to entice buyers. Such landscaping included both public and private areas of the subdivisions. Lush landscaping featuring imported and exotic vegetation was a particularly sought after amenity in the arid climate of the desert southwest and reflected a mindset that humanity could tame and control the natural environment.

Landscape design in the 1950s typically reflected a Mediterranean influence. Mediterranean plantings provided an appropriate plant palette that tolerated high heat conditions and required less water. These were usually supplemented with green lawns and broad leaf shrubs and hedges that required more substantial water resources. Lawns and broadleaf shade trees provided microclimate cooling. In some cases, Mediterranean plantings were supplemented by Sonoran Desert landscaping, creating a more regional landscape character. Examples of these hybrid landscapes included Poet's Corner, Highland Vista and Green Hills.

In some subdivisions with larger lot sizes, a few developers embraced the natural Sonoran Desert landscape of the Tucson basin. Richland Heights, originally platted in the 1920s in a location far outside of the city at the time, was conceived as a high-end subdivision, with houses on lots of 1 acre or more. The land was characterized by native creosote. The developers of Tanque Verde Country Estates created an agricultural and equestrian subdivision of large acreage within the pastoral setting of an exquisite riparian landscape adjacent to the Tanque Verde Wash. Harold Bell Wright Estates, a subdivision of custom homes on Tucson's east side, also embraced the native desert setting in the early 1950s.

#### Lusk Corporation

In the early 1950s, the Lusk Corporation emerged as a pre-eminent development and construction company, and achieved great success in developing mid-priced housing projects on Tucson's expanding east side. Lusk had a profound influence on residential design and subdivision planning in Tucson, and played a pivotal role in developing a regional character for Tucson subdivisions. The company was the only builder in the country to receive the National Association of Home Builders Award of Merit for six consecutive years, from 1955-1960.

Lusk's Highland Vista was one of the first subdivisions to use burnt adobe construction for FHA approved housing. Approximately 25% of the houses in Highland Vista were built using burnt adobe, but in subsequent Lusk developments--such as San Rafael, Indian Ridge and Kingston Knolls--nearly 90% of houses were constructed with burnt adobe.

Lusk was also one of the first builders to adopt the lower profile roof. (Although Arthur Brown had used a low-slope gable for the veterans houses in Country Club Manor in 1947, the concept did not become widely used in production housing until the early 1950s.) The low-slope gable roof was first seen at Highland Vista, and became standard in Lusk's work by 1954 in subdivisions such as Villa Serena and San Rafael. Burnt adobe and a low profile gable roof became quintessential characteristics of the Tucson version of the Ranch style.

Lusk was also one of the first to utilize horizontal sliding aluminum windows, at its Villa Serena subdivision in 1954.

The Modern Ranch houses at San Rafael and Indian Ridge represented the apex of Lusk's house designs, and were largely the work of Arthur Rader, who was the head of design for the company. The houses in both subdivisions were influenced by the Modern Movement, the Ranch style, regional forms and materials and were characterized by asymmetrical compositions, low-profile shed or gable roofs, large window walls, burnt adobe, open carports, and systematic construction. Both subdivisions also emphasized indoor-outdoor living. San Rafael and Indian Ridge are both listed on the National Register of Historic Places.

Lusk extended the concept of amenities by introducing neighborhood swimming pools into their subdivisions, an amenity that was particularly appropriate in the desert. At Highland Vista, the Lusk Corporation partnered with the developers of the neighboring Cinco Via subdivision and the neighborhood association to provide a park and swimming pool for residents. In 1952, these subdivisions were miles away from most city services. The developers provided the land and the neighborhood association established a swimming club that was supported by a bond attached to all the properties in the subdivision. Thus each property owner had a stake in the facility and a lower rate for membership than members from other neighborhoods. But the funding mechanism allowed Lusk to provide the amenity with limited financial investment. Lusk used this same model in future subdivisions as well.

#### Mid-1950s

In the mid-1950s two of Tucson's largest homebuilders, PAT Homes and Chesin Construction, partnered to create Terra Del Sol, an ambitious development that encompassed one square mile and included more than 1000 homes, 2 schools, 4 commercial developments, several multi-family housing projects, churches, a park and swimming pool. The project was the largest development in Tucson, and was the first master-planned community to fully come to fruition. Planning for the project took nearly two years to complete. The emphasis was on high volume and lower price points. The Terra Del Sol houses were typically Ranch style with low-slope roofs and their broadside parallel to the street. Options were available to homebuyers regarding roof type, carport size, shutters and paint colors as a way of providing distinction to individual houses and avoid repetition.

In contrast, a few smaller builders in the mid-1950s focused on providing distinction through architectural design. These included East Tucson Builders in Rosedale Acres, Copeland Construction in Mitman, Strunk Construction in Warsaw Addition No. 2, Tom Gist in the Leonora Addition, and Paul Buehrer, who each built small developments of Modern Ranch houses.

In 1957, Mecedora Club Estates was built west of downtown and was the first subdivision targeting seniors and retirees. Mecedora (which translates to "rocking chair") limited home ownership to people over 40 without children, and provided a clubhouse for social activities, a shuffleboard court and a swimming pool. Tree sizes and locations were limited to protect views.

The Tucson Home Builders Association began sponsoring an annual Parade of Homes in 1954 to promote the industry and showcase new housing concepts. Members would feature new designs and innovative features and equipment intended to simplify modern living. Concept

homes sponsored by national magazines such as Better Homes and Gardens also were popular during the 1950s and provided a way to disseminate new ideas for contemporary living.

#### Late 1950s

The Lusk Corporation's early work demonstrated innovation in architecture and planning, but in the late 1950s, the company moved away from an emphasis on design, and focused on lower price points and larger production volume to increase profits. To accelerate the construction process, the company built a manufacturing plant to produce pre-fabricated components. The company expanded its operations nationally and quickly became one of the largest homebuilders in the country.

As some of the largest developers shifted their focus toward building a more affordable product to increase sales volume, other developers and a second generation of builders began to embrace design as a way of distinguishing their homes.

The architecture firm of Ambrose, Swanson and Associates emerged in 1958. Ambrose and Swanson's design work was innovative and cost effective, and usually reflected the influences of both the Ranch style and the Modern Movement. The firm was in high demand after their design for Estate Development Corporation's Valentine Homes in the Ferry Addition sold 70 houses in just four weeks. The houses in Sambee Gardens for Beauty-Built Homes and the houses in Orange Grove Valley 1 for Maslow Construction were also early examples. The designs for Sambee Gardens and Orange Grove Valley both implemented large window walls and a 'kit of parts' construction system into the Ranch form.

In 1959, Busby-Carroll Construction hired Palmer and Krisel, an architecture firm nationally recognized for their Modern home designs, to design houses for their Flair development on the northwest side of Tucson. The models featured concrete masonry construction, including extensive use of decorative concrete blocks, ribbon windows and exposed structural elements. The houses did not sell very well, likely in part because of the northwest location. Busby-Carroll also utilized the plans in its Miramonte Terrace subdivision on the east side, which was more successful. Both subdivisions also had homes with dynamic roof forms designed by local architect Carl Lemar John.

# 1960s

#### Planning and Development

By 1960, most subdivision plats were being developed by large homebuilders, and few plats included multiple builders or custom homes. Subdivision planning saw the re-introduction and refinement of collector streets; hierarchical street organization was a significant modification in subdivision layout that provided greater clarity and wayfinding, and reduced large scale developments into smaller subsections. These roads were typically wider and in some cases had medians that provided a formal quality to the neighborhood entry sequence. Early subdivisions with collector streets included Sherwood Village, Rolling Hills and Desert Palms Park.

Developers also began to rethink utility infrastructure. Overhead utility lines had been standard procedure in early post-war subdivision development, but were an eyesore and a nuisance in a community that valued distant skyline views. Leonora and Desert Palms Park were some of the earliest developments that minimized or eliminated overhead utilities and installed electrical and telephone lines underground. It was also particularly significant in higher priced developments located north of the city such as Sabino Vista and Coronado Foothills Estates where mountain views were a critical selling point. Underground utilities were commonplace by the late 1960s.

In the late 1950s and early 1960s, homebuilders continued to build large-scale developments akin to Terra Del Sol, and with these large developments came more ambitious amenities. In Sherwood Village, Lusk included a 40 acre regional park, and at Lakecrest they built a 20 acre recreational lake. Of particular note was the Rolling Hills development created by Fred Busby, which included a broad array of recreational amenities, including a park, tennis courts, swimming pool, and--unprecedented in Tucson--an 18-hole executive golf course. Other amenities at Rolling Hills included a church, school, and a convenience store.

A severe downturn in the local housing market began in the early 1960s, putting serious economic pressure on the building industry. Between 1959 and 1966 the number of houses being built in the Tucson area dropped by nearly 80%, forcing some of Tucson's builders-including the Lusk Corporation--into bankruptcy. The recession created a shift in the priorities of the construction industry. Developers shifted to a business model primarily focused on location, square footage, volume and bottom line price, and as a result design and amenities became largely irrelevant.

Subdivision planning had achieved its apex by 1960 in developments like Rolling Hills and Sherwood Village. But after the onset of the recession, planning became static and in some respects began to devolve. Between 1965 and 1975 there was almost no evolution or innovation in planning, and most developments did not include recreational amenities as builders attempted to shed costs.

# Building Forms and Materials

The economic pressure also shaped the character of the houses in the 1960s. Many builders began using in-house draftsmen in lieu of architects to reduce costs; as a result, design quality was significantly diminished.

Long-standing questions about construction quality in the county, which had no building code or enforcement, also created conflict between the architecture profession and the homebuilding industry. Anecdotal evidence suggests that a push for the adoption of a building code in Pima County, where most new construction was taking place, antagonized members of the Tucson Home Builders Association and resulted in some architects, including Robert Ambrose, being blackballed by the industry. The need for a county building code had long been a question in the community, but became a much more prominent issue when the roof of the El Tanque Bowling Lanes collapsed in 1962. By the end of the decade, architects were rarely involved in production housing.

In a search for lower costs, builders made major concessions toward construction efficiencies. For example, in some subdivisions, masonry wall heights were reduced and limited to the height a mason could reach from a scaffolding board placed on 16" high concrete masonry blocks. This resulted in lower building heights, but also lower ceilings. Construction materials were reduced, details were simplified and drywall was used to cover nearly all interior surfaces. Large windows and exposed wood ceilings became less common.

The Ranch continued to be the primary building form in the 1960s. Thematic variations on the Ranch had been limited in the 1940s and most of the 1950s, and consisted primarily of Spanish Colonial influences. In an effort to attract homebuyers, greater exploration of thematic variations on the Ranch started in the late 1950s and early 1960s, and included Storybook, Colonial Revival, Spanish Colonial, Territorial and even Hawaiian. Thematic Ranch houses usually included the surface application of thematic motifs to the conventional Ranch form. A number of builders offered houses with a storybook character, which included scalloped fascias and asymmetrical cross-gable roofs inspired by fairy tales. The Territorial Ranch, a hybrid of Ranch style planning and parapeted wall forms from Arizona's past (including Territorial, Sonoran, and Spanish Colonial forms), emerged in subdivisions such as Desert Palms Park. There were also a few subdivisions that had split level Ranch houses.

Variations on the Modern Ranch continued as a small percentage of total production in subdivisions such as Windsor Park, but the form nearly disappeared after the mid- to late-1960s.

A few builders in the early 1960s did seek homebuyers through distinctive architecture. At Windsor Park, developer Herbert Oxman hired architects Ambrose, Swanson and Associates to design distinctive Modern Ranch houses that were characterized by expansive window walls, flat or transverse roofs, burnt adobe and systematic construction. Some Ranch models at Centennial Park were built in yellow brick (which was uncommon in Tucson) and had a transverse orientation with entry porches characterized by a pattern of tightly spaced post-and-beam structures.

Burnt adobe and slump block were the most common wall construction materials in the 1960s, although brick was also used in the first years of the decade. Tucson's concrete masonry industry introduced slump block masonry in the late 1950s to compete with burnt adobe. The material is referred to as "slump" block because, like adobe, the forms are removed before the concrete has fully set, and the block is allowed to slump to a shape with slightly convex faces. The material was nearly identical to burnt adobe in size, shape and texture, but it had several inherent technical advantages: concrete was a more stable material and had better moisture resistance, openings cast into the center of the blocks could accommodate steel reinforcing, manufacturers were able to provide better quality control, there was a range of colors available, and it was produced locally. But the material lacked the depth and richness of color and the association with brick construction.

In 1959, the Lusk Corporation was again at the forefront of innovation when it introduced the use of slump block on a large scale, in subdivisions such as Kingston Knolls, Sherwood Village

and Citation Park. In its earliest applications, slump block was painted, but for most applications during the 1960s and 1970s, slump block was left exposed in a range of colors.

Like the painted concrete masonry of the 1950s, slump block was first associated with lower-priced housing; but over time it became a more accepted material throughout the production housing industry. By the late 1960s, slump block had become the primary wall construction material for production housing in Tucson.

Built-up roofing continued to be the primary roofing material for most houses, but other materials were used for some thematic Ranch designs, including asphalt shingles and tile.

By the early 1960s, virtually all builders were using aluminum windows and sliding glass doors. Custom wood windows became far less common as the Modern Ranch form lost favor and as homebuilders tried to reduce costs.

#### Landscaping

In the mid- to late 1960s, the City's use of and relationship to water changed dramatically towards conservation. In response to this shift, combined with the shift in the development business model in the wake of the 1960s recession, most front yard landscapes for production housing projects were defined by minimal investment, low maintenance, and usually characterized by gravel ground cover and just a few ornamental evergreen plants. The cumulative result was a relatively barren streetscape. Any additional landscaping was provided by the homeowner.

There were a few exceptions that incorporated existing native desert vegetation that was located on the property prior to development. Rancho Perdido Estates was created within a mesquite bosque adjacent to the Tanque Verde Wash. And Windsor Park retained portions of the original desert vegetation and supplemented it with additional desert plants. And as development moved westward from the city and into the foothills of the Tucson Mountains, developments with larger lots also retained existing desert.

#### 1970s

# Housing Industry

The housing industry began to recover in the late 1960s, and construction continued to increase into the early 1970s. There were fewer large homebuilding companies during this period, as consolidation had occurred within the homebuilding industry in the wake of the economic slump. This resulted in less variation in planning and building forms, and less competition. In the early 1970s several large local builders were purchased by national companies, which continued to shift the focus of development away from design quality or innovation.

#### Building Forms and Materials

Although the conventional Ranch house was still a primary building form in Tucson in the late 1960s, Spanish Colonial and Territorial variations on the Ranch became more common. By the 1970s, the Territorial Ranch became the primary building form for production housing.

Much of the housing in the 1970s had no clear stylistic character; designs were often incoherent and emphasized square footage rather than space or form. Professionally trained designers were only rarely involved in production housing; exceptions included Tanque Verde Terrace, designed by architect Earl Kai Chann, and Berkshire Terrace, designed by Robert Swaim.

The shift toward slump block and away from burnt adobe in the late 1960s and 1970s coincided with and accommodated the shift toward parapeted wall construction and Territorial style houses. Although burnt adobe had better moisture resistance than standard mud adobe, it was still susceptible to moisture infiltration; so most construction relied on projecting roof eaves to protect the burnt adobe from extensive exposure to precipitation. Parapeted walls of burnt adobe were rare among production builders, and as the trend toward parapet wall construction continued into the 1970s, slump block dominated the production housing market.

To reduce costs, a few builders began using a slump block-wood frame hybrid construction. These builders used masonry along the front facade (thereby maintaining a masonry appearance from the street, and perhaps as a gesture to the 1950s THBA agreement regarding masonry construction), but used wood frame and sheathing on all other sides of the house, which reduced costs.

Most roofs were hidden behind parapets, so built-up roofing materials were no longer relevant to the appearance or architectural character of production houses. A few subdivisions used asphalt shingles.

Although carports were still very common, garages gained popularity during this period. Most houses typically included space for two cars, though some lower priced houses provided a carport for just a single car.

#### Landscaping

In the 1970s, landscape design for production housing projects was practically non-existent. The emphasis was on low-maintenance with decorative rock ground covers and token evergreen plants that required minimal maintenance and provided a consistent year-round appearance. Many subdivisions were bleak environments with stark parapeted wall surfaces, gravel ground covers, paved driveways, and just a few evergreen shrubs or palm trees. Carports would provide some depth to the facade, but houses with garages were particularly severe.

As development moved further east, regional growth plans put in place in the 1950s and 1960s began to limit the housing density for new development. So subdivisions built in the far east and northeast areas had acre-sized lots that were characterized by native desert vegetation. Drainage areas were typically set aside to minimize flooding issues and create common open space. Examples included Discovery Ridge and Rancho Del Este.

By the mid-1970s, attitudes toward water use had substantially shifted in Tucson. Homeowners concerned about high water bills or the environmental impact of high water use began to

remove the lush landscapes of the 1950s and early 1960s. Over the next 20 years, most lawns were removed in favor of low water use plants or decorative gravel and, as a result, few landscapes from the early post-war period have survived intact.

#### End of the Era

The post-war development period ended in the late 1970s. Many builders began to transition to wood frame construction, with building forms and materials reflective of trends in southern California. These houses were typically box-like forms characterized by stucco, simplified spanish colonial motifs, and terra cotta tile on hip or gable roofs. Developers also transitioned to lots with narrower street frontage. In addition, the eastward expansion waned as the land available for high density suburban development became more limited by zoning and geography. As a result, developers began to build in the far northwest and southwest areas of the city.

#### RESULTS AND RECOMMENDATIONS

The database analysis and the evaluations of significance identified 37 neighborhoods that should be considered priority subdivisions for City of Tucson preservation efforts. Most priority subdivisions scored a 4 or 5 in the evaluation of significance (as described in the Methodology section above). These subdivisions have been divided into three tiers, with the First Tier of 11 subdivisions identified as the 'highest priority,' 11 subdivisions in the Second Tier identified as 'high priority' and an additional 15 subdivisions in the Third Tier identified as 'priority.' These tiers are identified below.

# First Tier (highest priority):

Broadmoor (option to include portion of Broadway Village subdivision south of Arroyo Chico) Country Club Manor (Sundt Construction houses on 17th, 18th, and Eastland Streets) Frontier Village

Highland Vista-Cinco Via (contributing plats include Highland Vista, Cinco Via, Rosemont Park and Cloverland Addition)

Leonora Addition

Mansfield Heights/Tucson Heights (veterans houses on Waverly, Seneca and Linden Streets)

Pueblo Gardens

Rolling Hills (plats 1-5)

Tanque Verde Country Estates

Wilshire Heights

Windsor Park

# Second Tier (high priority):

Desert Palms Park

Encanto Park (option to include Bunell Addition plat)

Kingston Knolls Terrace

Miramonte Terrace (blocks 9-19)

Poet's Corner (contributing plats include Arnold Manor, Colonial Estates, Country Club Heights, Douglas Circle Addition, Hemsing Manor, Jackson Addition, Regency Manor; other plats that may be considered for inclusion are Belmont Heights, Brentwood and Norym-Tragle Addition) Sambee Gardens

Sherwood Village (contributing plats include Sherwood Village Terrace, Desert Steppes and Cloud Ridge East)

Tangue Verde Terrace (includes Waverly and Linden Streets in Verde Vista)

Terra Del Sol

Villa Serena

Warsaw Addition #2 (Hayhurst Street only)

# Third Tier (priority):

Berkshire Terrace
Centennial Park
Citation Park
Ferry Addition (Valentine Homes only)
Glen Heather Estates
Green Hills
La Madera-Miramonte
Mecedora Club Estates

Mitman (Copeland Construction houses)

North Campbell Estates
Rancho Perdido Estates
Richland Heights

Richland Heights
Rosedale Acres

San Fernando Village (option to include first Sharon Addition plat)

Vista Del Sahuaro (phases I and II)

A preliminary 'statement of significance' is provided for each priority subdivision to provide guidance and direction for pursuing National Register listing (see below).

These 37 neighborhoods represent less than 15% of the single-family residential subdivisions in Tucson built between 1945 and 1975.

It should be emphasized that subdivisions not included on the priority list may still be eligible for listing on the National Register of Historic Places; however, they were not afforded priority status, given current knowledge and understanding of the post-World War II era. This project is also not intended to provide definitive conclusions; as the information base about post-World War II housing expands over time, and as the integrity of relevant subdivisions evolves, the evaluations of integrity and significance may also evolve.

The integrity ratings may be utilized to prioritize the subdivisions within each tier. This can be interpreted in two ways: a) subdivisions with the highest integrity should be prioritized, or b) subdivisions with the lowest integrity or facing the greatest threats to integrity should be prioritized.

#### **Paul Buehrer Houses**

In addition to the subdivisions identified above, the houses of Paul Buehrer should also be prioritized for preservation, where possible. Buehrer designed and built more than 60 houses between 1952 and 1965, most of which are located within a two square mile area bounded by Broadway Blvd. to the north, Wilmot Rd. to the east, 22nd St. to the south, and Swan Rd. to the west. Buehrer's distinctive Modern Ranch designs were typically constructed of mortar-washed brick or burnt adobe, and often characterized by dynamic roof forms, large window walls, prominent chimneys and transverse (gable front) building orientations. His houses are usually

located in groupings of three or four, although there are locations where there are as many as 16 contiguous houses. Most were located in the Loma Linda, Wilshire Heights, Mesa Village, San Fernando Village, Milburn Manor, and Sharon Addition subdivisions. The Buehrer houses represent a small minority of the houses in these subdivisions, and the dispersed distribution suggests that the creation of a historic district would not be straightforward. Some of Buehrer's houses may be eligible for listing individually.





# **PRIORITY SUBDIVISIONS**

Below are summary descriptions of priority subdivisions. Notes on eligibility refer to the qualifications for listing on the National Register of Historic Places under Criterion A (broad patterns of history) and Criterion C (type, period, method of construction, or work of a master).

# First Tier Subdivisions (Highest Priority)

There are 11 post-World War II residential subdivisions included in the First Tier of priority subdivisions and these have been designated "highest priority" for City of Tucson preservation efforts. These were generally identified as exceptionally significant, and are strong candidates for historic designation.

It should be noted that two of these projects--Pueblo Gardens and Mansfield Heights/Tucson Heights--face significant threats to their integrity. Both should be considered critically endangered and soon may pass the point of recoverability. They have been included as top-tier candidates because they are the only two subdivisions in this study clearly conveying national significance. If the integrity issues are fully evaluated and determined not to be disqualifying, or if the integrity issues can be addressed, these are exceptionally important contributors to Tucson's history.

These First Tier subdivisions are identified below (in alphabetical order):

The **Broadmoor** subdivision is significant as an early and outstanding example of mid-20th century subdivision design and development. The subdivision was one of the first post-World War II developments in Tucson, and was one of the first subdivisions to eschew the city's rectilinear street grid and embrace modern planning concepts for mid-priced residential development. These concepts included curvilinear and discontinuous streets, limited access points, and an inward orientation. The subdivision was also one of the first cohesive collections of Ranch style houses in Tucson. The southern portion of the adjacent Broadway Village subdivision was developed concurrently with Broadmoor, and could be considered for inclusion within the proposed historic district. Broadmoor was platted in 1944, and primary build-out took place between 1945 and 1956. The subdivision is





eligible under Criterion A and C at the local level of significance.

The M. M. Sundt Construction Co. housing project located within the **Country Club Manor** subdivision is significant as a cohesive collection of exceptional mid-20th century Modern houses designed and built specifically for returning World War II veterans. The innovative house design was created by Arthur Brown, one of Tucson's most significant architects of the Modern period. To avoid the repetition that



was inherent in production housing, Brown developed a flexible plan that could be rotated on site to provide four alternative street elevations; by mirroring the plan there were a total of eight possible elevations facing the street. The development is also significant as one of the first examples of Modern production housing in Tucson, and it may have been an early example nationally. The development is likely eligible as a historic district, though a substantial percentage of houses have been modified. The Sundt houses are located on 17th, 18th, and Eastland Streets, between Country Club Road and Treat Avenue. Build-out of the houses took place in 1947. The project is eligible under Criterion A and/or C at the local (and perhaps national) level of significance.

The Frontier Village subdivision is significant as an early example of mid-20th century subdivision design and development. Frontier Village was the first large-scale production housing development in Tucson, and was also likely the first to receive FHA financing approval. In addition, the subdivision was likely the first project in Tucson to embrace modern subdivision planning concepts-including curvilinear streets--for a production housing development. It was also one of the earliest developments to utilize a Transitional Ranch style of architecture in Tucson. Frontier Village was platted in 1945, and primary build-out took place during the years 1946-1953. The subdivision is eligible under Criterion A and/or C at the local level of significance.





# The Highland Vista-Cinco Via

neighborhood is significant as an early and outstanding example of mid-20th century subdivision design and development, and as a collection of innovative houses shaped by regional influences. Highland Vista-Cinco Via includes four separate subdivisions: Highland Vista, Cinco Via, Rosemont Park and Cloverland Addition. The Highland Vista subdivision was built by the Lusk Corporation, one of Tucson's most important builders and developers of the post-World War II era. The subdivision received a national design award, and was pivotal in the evolution of Tucson production housing design and subdivision development. It was one of the first subdivisions to use burnt adobe construction for FHA-approved production housing in Tucson, and the first to use it on a large scale. The subdivision was also one of the first to utilize a low-slope gable roof for production housing. Low-profile gable roofs and burnt adobe construction





would become quintessential characteristics of a distinctive Tucson version of the Ranch style house. Highland Vista-Cinco Via is also significant for the recreational amenities provided to entice home buyers, including a park and swimming pool. The neighborhood swimming pool was the first of its kind in Tucson provided for a mid-priced housing development. The first plats were developed in 1952, and primary build-out took place between 1952 and 1965. The neighborhood is eligible under Criterion A and C at the local level of significance.

The Tom Gist houses in the **Leonora** subdivision are significant as a collection of outstanding and distinctive mid-century Modern Ranch houses. Gist was one of the most important designers and builders of the post-World War II era in Tucson. The award-winning houses are characterized by burnt adobe, low-slope gable roofs, large window walls, ribbon windows,



and Gist's signature architectural detailing. The Gist houses represent a minority of the houses in the subdivision (approximately 25%) and are not contiguous; as a result the creation of a district would not be straightforward. Alternatively, most of the Gist houses may be eligible individually, as

significant examples of the work of a master. The entire Leonora subdivision may also potentially be eligible as an historic district; Leonora's primary significance is as the location of the highest concentration of Gist houses, but it is also a representative collection of Ranch and Modern Ranch houses of the period and is the only example of Gist's participation in subdivision development. Leonora was one of the first subdivisions to eliminate overhead utilities--Gist installed electrical and telephone lines underground in order to preserve mountain and skyline views from the extensive windows in his houses. The subdivision is also notable for the retained desert landscape and supplemental Sonoran plantings. The first plat of the subdivision was created in 1952, and primary build-out of the entire subdivision took place between 1952 and 1964; Gist's work in the subdivision began in 1953-54. If eligible, the subdivision would qualify under Criterion C at the local level of significance.

The Mansfield Heights/Tucson Heights veterans housing project is significant as a collection of early mid-20th century Modern houses designed and built specifically for returning World War II veterans. The development was created at the behest of the Tucson community for returning veterans and was recognized nationally as one of the first of its kind. The development was also the first example of Modern production housing in Tucson, and one of



the first examples nationally. Build-out for the project took place between 1946 and 1948. The houses are primarily located on Waverly, Linden and Seneca Streets, between 1st Avenue and 6th Avenue. The project's integrity is questionable, as many of the properties have been modified over the years, and in some cases the properties are discontiguous. The project, if eligible, would qualify under Criterion A and/or C at the local and national levels of significance.

The **Pueblo Gardens** subdivision is significant as one of the first large-scale master planned housing developments of the post-World War II period in Tucson. The project was developed by Del Webb, a nationally recognized builder and developer, and designed by A. Quincy Jones, who was later recognized nationally as one of the premier architects of the Modern period. The subdivision introduced significant landscape and planning concepts to Tucson. The development was also one of the earliest examples of Modern production housing in Tucson and was notable for the



speed and efficiency of construction. The subdivision was platted in 1948, and primary build-out took place in 1948-49. The subdivision's integrity is questionable, particularly because of changes to the architecture and, most significantly, the landscape. If eligible, the subdivision would likely qualify under Criterion A and C at the local and national levels of significance.



The **Rolling Hills** subdivision is an exceptional example of mid-20th century subdivision design and development. The development represented the apex of subdivision planning and implemented amenities never before seen in Tucson mid-priced production housing, including an 18-hole executive golf course. The subdivision was originally platted in 1960, and primary build-out took place between 1960 and 1975. Rolling Hills plat #6 was built outside of the period of significance and is excluded from the potential district. The subdivision is eligible under Criterion A and/or C at the local level of significance.



The **Tanque Verde Country Estates** subdivision is significant as an early and distinctive example of mid-20th century subdivision design and development. The subdivision is located within a

mesquite bosque and riparian area adjacent to the Tanque Verde Wash. The landscape provides a distinctive character within the Sonoran Desert context. The subdivision could be eligible by itself or as part of a larger district as a rare surviving example of a rural landscape shaped by the features associated with a major watercourse, including dense vegetation, farming and equestrian facilities. Tanque



Verde Country Estates was platted in 1949, and primary build-out took place between 1952 and 1964. Integrity of the architecture is questionable and requires further scrutiny, though the landscape continues to convey its historic character. If eligible, the subdivision would likely qualify under Criterion A or C at the local level of significance.



The Wilshire Heights subdivision is significant as an early and outstanding example of mid-20th century subdivision design and development for custom homes, and as a cohesive collection of outstanding Ranch and Modern Ranch houses. The subdivision was platted in 1948, and primary build-out took place between 1949 and 1963. The subdivision is eligible under Criterion A and/or C at the local level of significance.



The **Windsor Park** subdivision is significant as a cohesive collection of exceptional mid-20th century Modern and Modern Ranch houses designed by Ambrose, Swanson and Associates -- one of the most prominent

architecture firms of production housing in Tucson's post-World War II development-- and built by Herbert Oxman. The subdivision is perhaps the best example of Modern production housing in Tucson. The houses were shaped by the Modern Movement, the California suburban Ranch house, regional forms and materials, and a consideration of



local climate conditions and view sheds. The subdivision is also significant for the native desert landscape. Windsor Park was platted in 1962, and the primary build-out took place in three phases between 1961 and 1969. The subdivision is eligible under Criterion C at the local level of significance.

# **Second Tier Subdivisions (High Priority)**

There are 11 subdivisions included in the Second Tier. These are also strong candidates for NRHP listing, and have been designated "high priority" for City of Tucson preservation efforts:

The **Desert Palms Park** subdivision is significant as an outstanding example of mid-20th century subdivision design and development. The subdivision's developer, Otto Small, was identified as the Developer of the Year in 1962 for Desert Palms Park by the Tucson Home Builders Association, and the subdivision was twice the site of the Tucson Home Builders Parade of Homes. The subdivision was also one of the first in Tucson to introduce the Territorial Ranch style on a substantial scale. The subdivision was platted in 1961 and primary build-out took place between 1961 and 1971. The subdivision is eligible under Criterion A and C at the local level of significance.





The Encanto Park subdivision is significant as an early example of mid-20th century subdivision design and development, and as a cohesive collection of outstanding post-war custom Ranch houses. The adjacent Bunell Addition was developed concurrently and may be considered for inclusion in a proposed district. Encanto Park was platted in 1947,



and build-out took place over the next 10 years. Encanto Park is eligible under Criterion A and/ or C at the local level of significance.

Kingston Knolls Terrace is

significant as an outstanding example of mid-20th century subdivision design and development, and as a cohesive collection of Ranch houses shaped by regional influences. The subdivision received a national design award and was built by the Lusk Corporation, one of Tucson's most important builders and developers of the post-World War II era. The subdivision layout provided for an elementary school, swimming pool, and extensive commercial development. The houses are primarily characterized by burnt adobe construction and low-profile gable roofs, quintessential characteristics of a distinctive Tucson version of the Ranch style. Lusk was the first developer to utilize slump block construction for production housing, and Kingston Knolls was





one of the first subdivisions where Lusk implemented its use. The subdivision was platted in 1957, and primary build-out took place during the years 1957-61. Kingston Knolls Terrace is eligible under Criterion A and/or C at the local level of significance.

Blocks 9-19 of the **Miramonte Terrace** subdivision are significant as a distinctive collection of Modern Ranch houses. Many of the houses were designed by Palmer & Krisel, a nationally recognized architecture firm based in Palm Springs, California. The houses feature



decorative concrete masonry, ribbon windows, exposed structural components, along with dynamic roof forms. Platting of blocks 9-19 began in 1957; primary build-out took place between 1957 and 1963. The subdivision is eligible under Criterion C at the local level of significance.

The Poet's Corner neighborhood is significant as an early and outstanding collection of midcentury Ranch and Modern Ranch houses in Tucson. The subdivision is also distinctive for its landscaping, which was an early example of retained desert integrated with Mediterranean and native Sonoran Desert plantings. The neighborhood is comprised of several subdivisions. including Arnold Manor, Colonial Estates, Douglas Circle, Hemsing Manor, Jackson Addition, Regency Manor, and portions of Country Club Heights. Belmont Heights, Brentwood and Norym-Tragle should also be considered for inclusion. This array of small subdivisions is unified as a community in part by a grid of streets named for famous authors. The perimeter of the neighborhood is defined by Broadway Blvd. to the south, Columbus Ave. to the east, 5th Street to the north, and Longfellow Rd. and Alvernon Way to the west. Primary build-out took place between 1946 and 1958. Poet's Corner is eligible under Criterion C at the local





The **Sambee Gardens** subdivision is significant as a unique and distinctive collection of Modern Ranch houses in Tucson. The houses were designed by noted architecture firm Ambrose, Swanson and Associates and feature a hybrid post-and-beam and bearing wall construction system, multiple building orientations, and large entry porches that are integrated into the attached carports. The subdivision was platted in 1958 and primary build-out was

level of significance.



completed by 1960. The subdivision is likely eligible as a historic district, though a substantial percentage of houses have been modified. If eligible, Sambee Gardens would qualify under Criterion C at the local level of significance.

The Sherwood Village neighborhood is significant as an exceptional example of mid-20th century subdivision design and development. The project represented the apex of subdivision master-planning in Tucson and received a national design award. The project was built by the Lusk Corporation, one of Tucson's most important builders and developers of the post-World War II period. The neighborhood included more than 1000 homes and featured a 40-acre regional park, an elementary school, multi-family housing projects and several commercial developments. The neighborhood includes three separate subdivisions: Sherwood Village Terrace, Cloud Ridge East, and Desert Steppes. The subdivisions were first platted in 1959, and primary build-out



by Lusk took place between 1959 and 1964. Lusk went into bankruptcy in 1965, before Desert Steppes was completed; a portion of the subdivision was built-out by other builders in the late 1960s. The development is eligible under Criterion A and/or C at the local level of significance.

# subdivision is significant as a distinctive collection of Modern Ranch houses in Tucson. The houses were designed by architect Earl Kai Chann and built by Herbert Oxman. The Tanque Verde Terrace subdivision was platted in 1970, and

The Tanque Verde Terrace

primary build-out took place in 1971-72. Oxman expanded into the



adjacent Verde Vista subdivision on Waverly and Linden Streets; these houses should also be considered for inclusion in a proposed district. The subdivision is eligible under Criterion C at the local level of significance.

The Terra Del Sol subdivision is significant as an important example of mid-20th century subdivision design and development. Encompassing one square mile, the subdivision was the largest development of the post-World War II period, and was the first master-planned community to fully come to fruition in Tucson. The development included more than 1000 single-family houses, two schools, four commercial developments, several multi-family housing projects, churches, a park and a community swimming pool. The subdivision was first platted in 1955, and build-out was completed by 1959. Terra Del Sol is eligible under Criterion A and/or C at the local level of significance.



The Villa Serena subdivision is significant as a distinctive collection of Modern Ranch production houses for entry-level housing, and as an early example of mid-20th century subdivision design and development. The subdivision was built by the Lusk Corporation, one of



Tucson's most important builders and developers of the post-World War II era. The houses are characterized by ribbon windows, painted concrete masonry, and a low-profile roof. The subdivision was also one of the first in Tucson to implement the use of horizontal-sliding aluminum windows and doors. Villa Serena was platted in 1954, and build-out was completed by 1955. The subdivision is eligible under Criterion A and/or C at the local level of significance.

The R.W. Strunk houses on Hayhurst Street in the **Warsaw Addition No. 2** subdivision are significant as a distinctive collection of Modern Ranch houses in Tucson. The small houses are

characterized by a transverse building orientation, low-slope gable roof, burnt adobe, and large window walls. The subdivision was platted in 1953, and the houses were built between 1956 and 1958. The Strunk houses are eligible under Criterion C at the local level of significance.



## Third Tier Subdivisions (Priority)

There are 15 developments included in the Third Tier. These are also strong candidates for NRHP listing, and have been designated "priority" for City of Tucson preservation efforts:

The **Berkshire Terrace** subdivision is significant as a unique and distinctive collection of houses in Tucson. The houses are a hybrid of the Territorial Ranch style and Modern influences, and were designed by architect Robert Swaim. The subdivision was platted in 1972 and primary build-out occurred from 1974 to 1976. The subdivision is eligible under Criterion C at the local level of significance.



The **Centennial Park** subdivision is significant as a unique and distinctive collection of Ranch houses in Tucson. Many of the houses are constructed with yellow brick--which was uncommon in Tucson--and have a transverse orientation with entry porches characterized by tightly spaced post-and-beam wood framing. Phases 1 and 2 are eligible



for inclusion in the proposed historic district. Centennial Park was platted in 1961 and primary build-out was completed by 1965. The subdivision is eligible under Criterion C at the local level of significance.

The Citation Park subdivision is significant as an innovative example of mid-20th century subdivision design and development. The subdivision was built by the Lusk Corporation, one of Tucson's most important builders and developers of the post-World War II period. Lusk was the first developer to utilize slump block construction for production housing, and first implemented slump block construction on a large scale at Citation Park. The



subdivision was platted in 1959, and primary build-out was substantially completed by 1962. The subdivision is eligible under Criterion A and/or C at the local level of significance.

The Valentine Homes in the **Ferry** subdivision are a unique and distinctive collection of Ranch houses designed by Ambrose, Swanson and Associates. The houses were the first Ambrose Swanson design for production housing and were influential in the entry-level housing market. The houses are characterized by front



entry porches, rotated building orientations, and decorative patterns in the concrete masonry and wood sheathing. The houses are primarily located on Rosemont, Magnolia, and 32nd Streets, but are also located on 29th, Cleveland, Stern, and Beverly Streets. The subdivision was platted in 1948, and the Valentine houses were built in 1958. The houses are eligible under Criterion C at the local level of significance.

The **Glen Heather** subdivision is significant as an outstanding example of mid-20th century subdivision design and development and as a cohesive collection of Ranch houses shaped by regional influences. The subdivision was built by the Lusk Corporation, one of Tucson's most important builders and developers of the post-World War II period. The houses are characterized by burnt adobe construction and low-profile gable roofs, quintessential



characteristics of a distinctive Tucson version of the Ranch style. Glen Heather was platted in 1956, and primary build-out was completed by 1960. The subdivision is eligible under Criterion A and/or C at the local level of significance.

The **Green Hills** subdivision is significant as an early and distinctive example of mid-20th century subdivision design and development. The Ranch style houses are characterized by elongated floor plans, low-slope gable roofs, mortar-washed brick, decorative concrete masonry, slender steel pipe columns, and integrated planters and patio walls. The patio walls extend the houses outward into the landscape, and the extremely low-profile roofs emphasize the horizontal character of the houses. The subdivision is also notable for incorporating native palo verde trees

that were located on the site prior to development, and the integration of Sonoran and Mediterranean landscaping. Green Hills was platted in 1954, and primary build-out took place between 1955 and 1959. The subdivision is eligible under Criterion A and/or C at the local level of significance.



#### The La Madera-Miramonte

development is significant as an early example of mid-20th century subdivision design and development. The subdivision layout is notable for the large community park located at the center of the development. This was an early example of a developer providing a recreational amenity for mid-priced housing. The subdivisions were platted in 1946, and primary build-out was completed



by 1954. The development is eligible under Criterion A and/or C at the local level of significance.

#### Mecedora Club Estates is

significant as the first example of a subdivision development specifically for retirement living in Tucson. The subdivision had restrictions that required all residents to be over 40 years of age, and amenities were provided that targeted adults and retirees. The subdivision was first platted in 1957 and primary build-out occurred between 1957 and 1961. It



is eligible under Criterion A and/or C at the local level of significance.

The houses built by Copeland Construction in the **Mitman** subdivision are significant as a collection of outstanding and distinctive Modern Ranch houses. The houses were designed by Bernard Friedman, one of Tucson's leading Modern architects of the era. The houses are characterized by brick and mortar-washed brick, rotated building orientations that are located at an oblique angle to the street grid, angular porches and carports, trapezoidal-shaped windows

beneath the eave on the gable-end wall, and a continuous wall of glass along the entire length of the house. The Copeland houses represent a minority of the houses in the subdivision, and are not contiguous; therefore, the creation of a district may not be straightforward. A larger portion of the Mitman development may also be eligible as an historic district. The early platting of Mitman in the 1920s resulted in lot dimensions that were unusually narrow for the post-World War II period; as a result a large percentage of the houses are positioned in a transverse orientation, with the broad side perpendicular to the street. The angled and perpendicular orientations create a distinctive character for the street scape. This





larger district would likely be defined by 5th Street to the south, Sahaura Ave. to the east, 2nd Street to the north, and Jefferson Ave. or Craycroft Rd. to the west. Primary build-out of Mitman occurred between 1952 and 1960; the Copeland houses were largely built between 1954 and 1956. If eligible, the development would qualify under Criterion C at the local level of significance.

North Campbell Estates is significant as an early and outstanding example of mid-20th century subdivision design and development, and as a cohesive collection of custom Ranch houses. The subdivision was platted in 1949, and primary build-out occurred between 1949 and 1961. The subdivision is eligible under Criterion A and/or C at the local level of significance



Rancho Perdido Estates is significant as a unique example of mid-20th century subdivision design and development. The subdivision is located within a riparian area adjacent to the Tanque Verde Wash and is primarily characterized by a dense mesquite bosque; trees were shaped by the developer to create a distinctive landscape environment. The subdivision was platted in 1960, and primary build-out



took place between 1963 and 1971. It is eligible under Criterion A and/or C at the local level of significance.

The **Richland Heights** subdivision is significant as an early and distinctive example of mid-20th century subdivision design and development. The subdivision is characterized by large lots,

extensive native desert, and dirt roads, which combine to give the subdivision a rural feeling. Primary build-out of the subdivision took place over a 30-year period, from 1938 to 1967. The historic integrity of the architecture and subdivision layout should be reviewed, as a substantial number of houses have been modified and a substantial number of lots have been subdivided, which has allowed new single-family housing to be built in recent years. The character of the creosote landscape remains intact. The subdivision is eligible under Criterion A or C at the local level of significance.





The Rosedale Acres subdivision is significant as a distinctive collection of Ranch houses in Tucson. The houses are characterized by brick construction, wood paneling, large windows and window walls, and a distinctive U-shaped roof line. The subdivision was platted in 1953 and primary build-out was completed in 1954. The subdivision is eligible



under Criterion C at the local level of significance.

The **San Fernando Village** subdivision is significant as an early and cohesive collection of custom Ranch houses shaped by regional influences. The subdivision was one of the first multiple-builder developments that reflected a distinctive Tucson version of the Ranch style. The houses were generally characterized by low-slope gable roofs, burnt adobe and mortar-washed

brick. The subdivision layout, lot dimensions and setback requirements limited the range of planning dimensions and shaped the houses into a more elongated form, resulting in a more horizontal character along the street scape. The adjacent Sharon Addition subdivision on 20th Street may be considered for inclusion as part of a larger district, as the two subdivisions share similar characteristics and feature some of the same builders. San Fernando Village was platted in 1954, and primary build-out occurred between 1954 and 1965. The subdivision is eligible under Criterion C at the local level of significance.





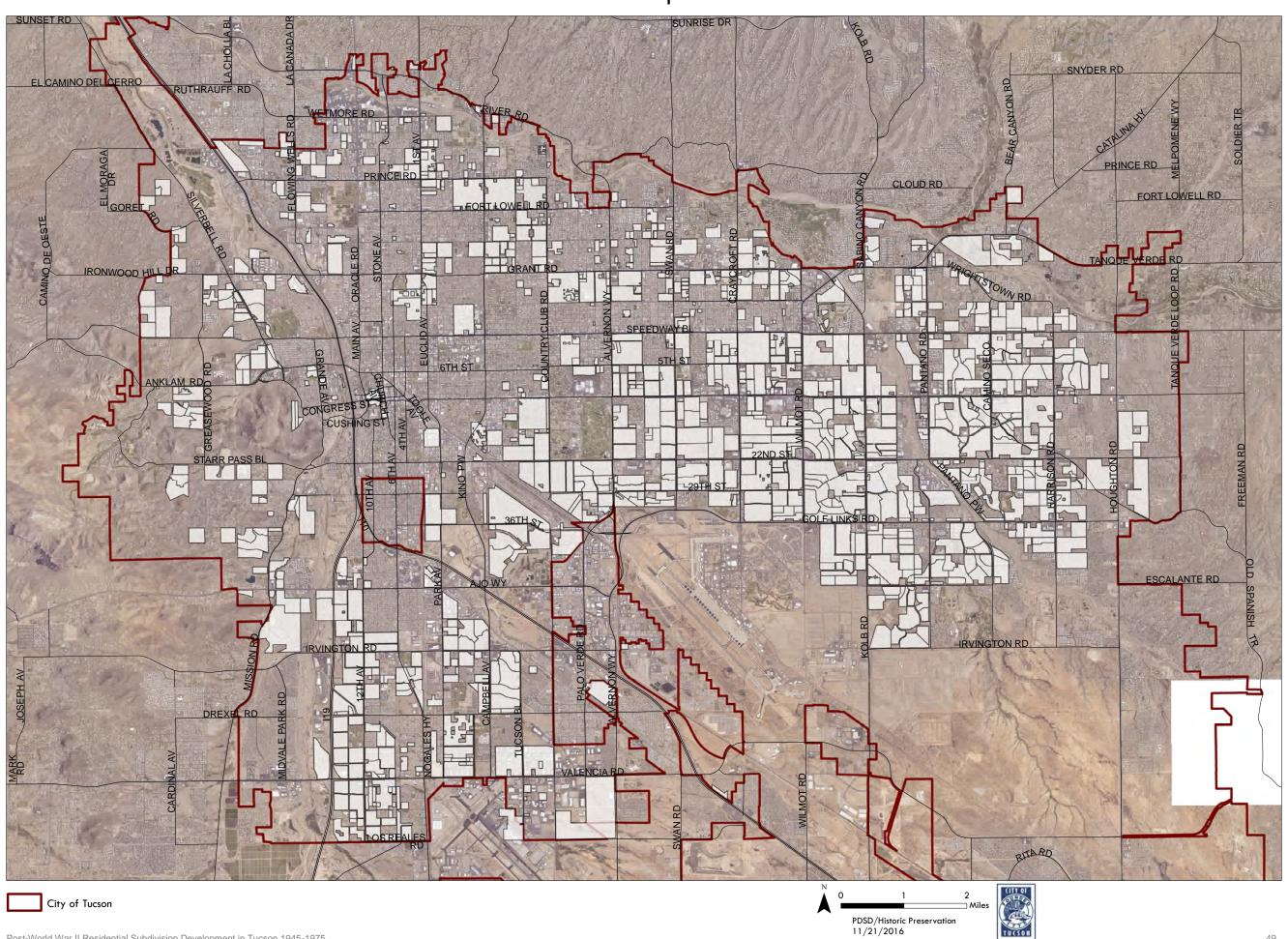
The **Vista Del Sahuaro** development is significant as an outstanding example of mid-20th century subdivision design and development, and as a cohesive collection of award-winning Ranch houses shaped by regional influences. Phases I and II are eligible for inclusion. The subdivision was platted in 1956, and primary build-out occurred between 1958 and 1963. The subdivision is eligible under Criterion A and/or C at the local level of significance.



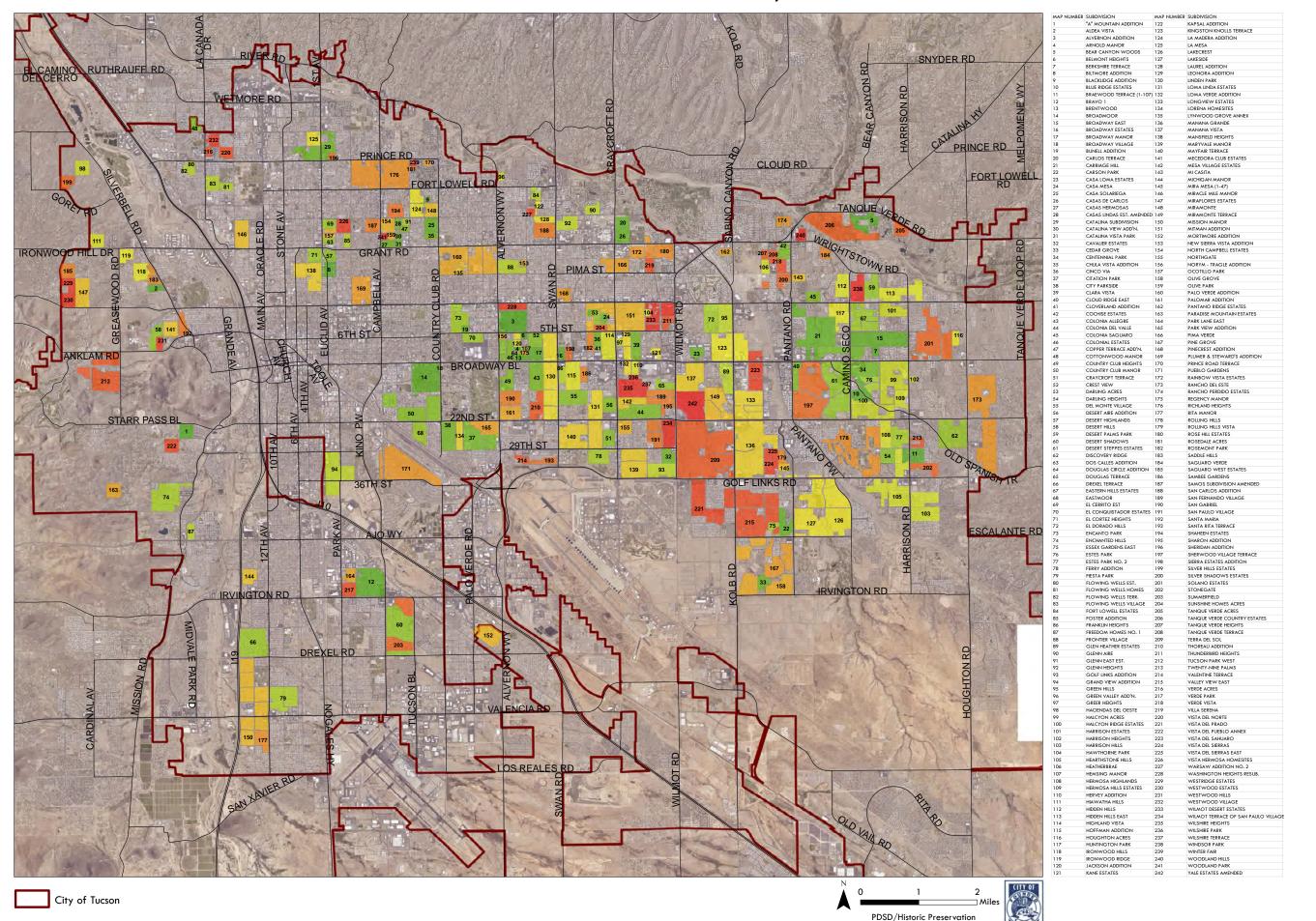


# **MAPS**

# Tucson Subdivision Development 1945-1975



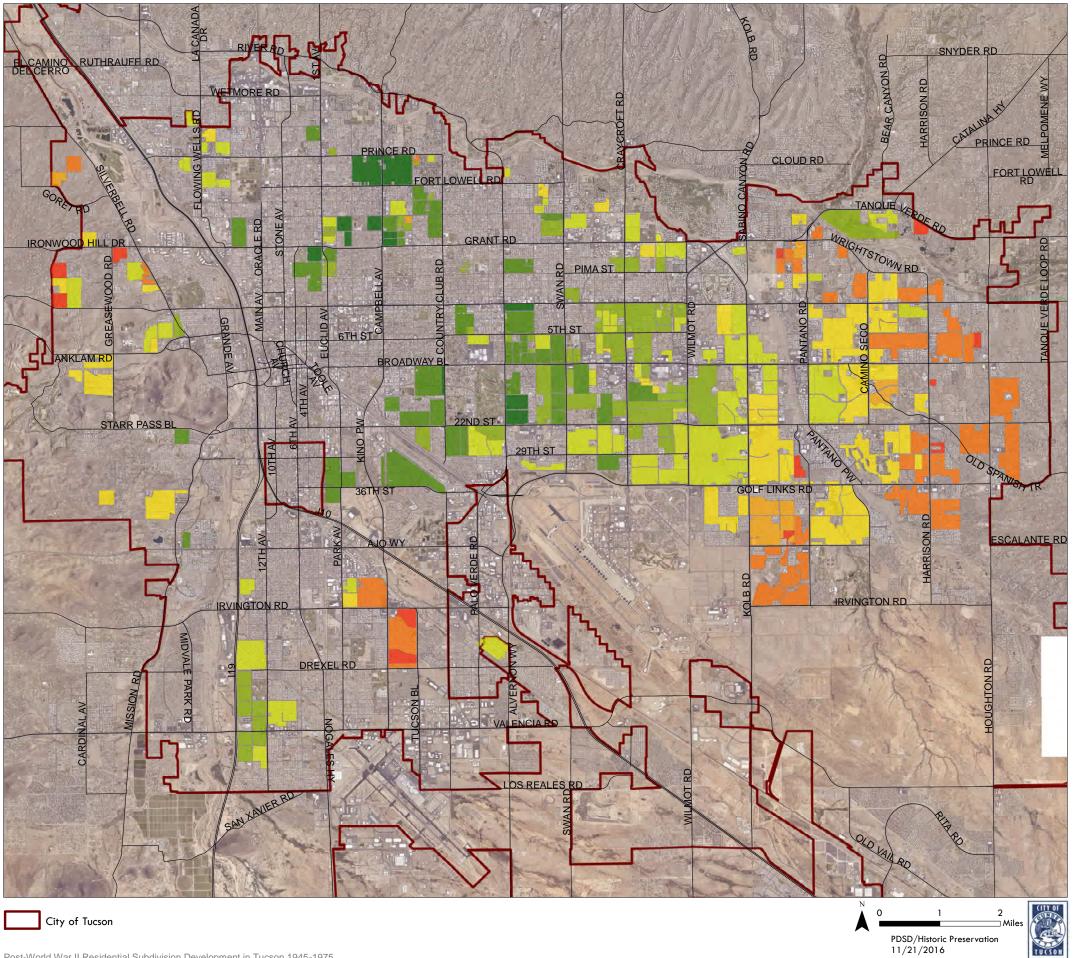
# Post-World War II Subdivision Survey

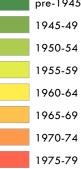


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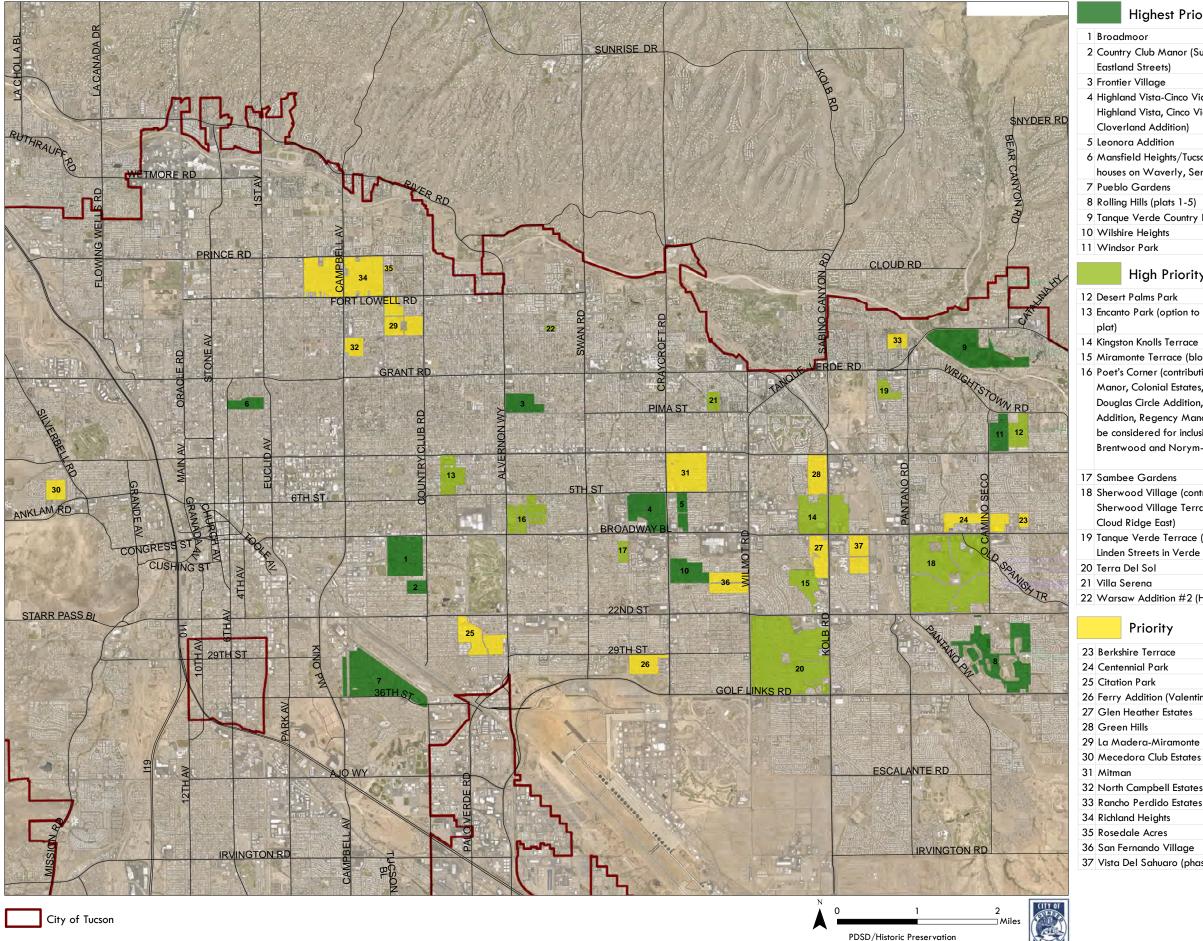
Post-World War II Residential Subdivision Development in Tucson 1945-1975

# Start Date of Primary Build-Out





# **Priority Subdivisons**



- 2 Country Club Manor (Sundt houses on 17th, 18th,
- 4 Highland Vista-Cinco Via (contributing plats include Highland Vista, Cinco Via, Rosemont Park and Cloverland Addition)
- 5 Leonora Addition
- 6 Mansfield Heights/Tucson Heights (veterans houses on Waverly, Seneca and Linden Streets)
- 8 Rolling Hills (plats 1-5)
- 9 Tanque Verde Country Estates

## High Priority

- 12 Desert Palms Park
- 13 Encanto Park (option to include Bunell Addition
- 14 Kingston Knolls Terrace
- 15 Miramonte Terrace (blocks 9-19)
- 16 Poet's Corner (contributing plats include Arnold Manor, Colonial Estates, Country Club Heights, Douglas Circle Addition, Hemsing Manor, Jackson Addition, Regency Manor; other plats that may be considered for inclusion are Belmont Heights, Brentwood and Norym-Tragle Addition)
- 17 Sambee Gardens
- 18 Sherwood Village (contributing plats include Sherwood Village Terrace, Desert Steppes and Cloud Ridge East)
- 19 Tanque Verde Terrace (includes Waverly and Linden Streets in Verde Vista)
- 22 Warsaw Addition #2 (Hayhurst Street only)

#### Priority

- 23 Berkshire Terrace
- 26 Ferry Addition (Valentine Homes only)
- 27 Glen Heather Estates
- 29 La Madera-Miramonte
- 30 Mecedora Club Estates
- 32 North Campbell Estates

- 36 San Fernando Village
- 37 Vista Del Sahuaro (phases I and II)

11/21/2016

#### MAJOR BIBLIOGRAPHICAL REFERENCES

#### Archival Collections

Tucson Daily Citizen newspaper database, 1941-1977. Ancestry.com. <a href="www.ancestry.com">www.ancestry.com</a>. City of Tucson geographic information systems <a href="http://maps.tucsonaz.gov/hcd/index.html?">http://maps.tucsonaz.gov/hcd/index.html?</a> <a href="http://maps.tucsonaz.gov/hcd/index.html?">NHA CITY=181</a>

City of Tucson plat maps database <a href="https://www.tucsonaz.gov/apps/maps-and-records/smp">https://www.tucsonaz.gov/apps/maps-and-records/smp</a>
City of Tucson Historic Preservation Office online resources <a href="http://www.tucsonaz.gov/historic-preservation">http://www.tucsonaz.gov/historic-preservation</a>

Modern Architecture Preservation Project--Tucson; archive

Tucson Historic Preservation Foundation online ephemera archive: <a href="https://preservetucson.org/resources/mid-century-ephemera">https://preservetucson.org/resources/mid-century-ephemera</a>

#### Selected Articles, Books, Publications

- Akros, Inc. "Tucson Post World War II Residential Subdivision Development, 1945 1973." Tucson, Arizona: City of Tucson Urban Planning & Design Department, Historic & Cultural Resources: October 2007.
- Allen, Barbara L. "The Ranch-Style House in America: A Cultural and Environmental Discourse." *Journal of Architectural Education*, 49:3 (1996): pp. 156-163.
- Ames, David L. "Interpreting Post-World War II Suburban Landscapes as Historical Resources." *Preserving the Recent Past*, edited by Deborah Slaton & Rebecca A. Schiffer. Washington, D.C.: Historic Preservation Education Foundation, 1995.
- Arthur Brown: Architect, Artist, Inventor. Compiled by Kathryn M. Wayne. Tucson: College of Architecture Library, University of Arizona. 1985.
- Bricker, David. "Ranch Houses are Not All the Same." *Preserving the Recent Past 2*, edited by Deborah Slaton and William G. Foulks. Washington, D.C.: Historic Preservation Education Foundation, 2000.
- Buehrer, Paul R. By the Seat of My Pants: My Life Story. Marilyn Ruth Buehrer, editor. Tucson: 2008.
- Clinco, Demion, and Chris Evans. "San Rafael Estates Historic District National Register Nomination." Tucson. 2012.
- Crosse, John. "A. Quincy Jones and Pueblo Gardens: The First Modern Tract." Southern California Architectural History; website: <a href="http://socalarchhistory.blogspot.com/2010/12/quincy-jones-and-pueblo-gardens-first\_29.html">http://socalarchhistory.blogspot.com/2010/12/quincy-jones-and-pueblo-gardens-first\_29.html</a>. Dec. 2010.
- Eddy, Don. "Who Says You Can't Build." *The American Magazine*. Springfield, Ohio: Crowell-Collier, July 1947.
- Erly, Elissa. "Preserving Post-World War II Subdivisions." unpublished paper. Tucson: University of Arizona, 2007.

- Evans, Chris. "The Residences of Tom Gist in Tucson, Arizona 1947-1981, Multiple Property Documentation Form." Tucson. 2012.
- Evans, Chris. "Windsor Park National Register Nomination." Unpublished draft. Tucson. 2015.
- Evans, Chris and R. Brooks Jeffery. *Architecture of the Modern Movement in Tucson, Arizona* 1945-1975. (draft). Tucson: Modern Architecture Preservation Project, 2005.
- Finbraaten, Erika. *Post World War II Homebuilding: An Industrial Revolution*. Phoenix: Arizona State University, Masters Thesis, 2003.
- Fox, Jason, Brandy Billingsley, Sai Ho Hiew, Jeff Leven, Andrew Munandar, Elizabeth Rendon and David Short, assisted by R. Brooks Jeffery. "Winterhaven Historic District National Register of Historic Places Registration Form." Tucson: Preservation Studies, CAPLA, University of Arizona; 2002.
- Hecht, Melvin. "Decline of the Grass Lawn Tradition in Tucson." *Landscape Magazine*. May 1975.
- Hess, Alan. The Ranch House. New York: Harry N. Abrams, 2004.
- Jeffery, R. Brooks, "Josias Joesler: Architectural Eclectic;" website: <a href="http://parentseyes.arizona.edu/josiasjoesler/index.html">http://parentseyes.arizona.edu/josiasjoesler/index.html</a>; April 2009.
- Jeffery, R. Brooks. "20th-Century Residential Landscapes." *Cross-Cultural Vernacular Landscapes of Southern Arizona*, edited by Laura H. Hollengreen & R. Brooks Jeffery. Tucson, Arizona: Vernacular Architecture Forum, 2005.
- Luckingham, Bradford. The Urban Southwest: A Profile History of Albuquerque, El Paso, Phoenix and Tucson. El Paso, Texas: University of Texas Press, 1982.
- May, Cliff. Western Ranch Houses, Sunset Magazine, editors; San Francisco: Lane Publishing, 1946.
- McAlester, Virginia and Lee McAlester. *A Field Guide to American Houses*. New York: Alfred A. Knopf, 2006.
- McClain, Jerry. "Pueblo Gardens." Arizona Highways Magazine. November 1948.
- McCoy, Esther and Evelyn Hitchcock. "The Ranch House," in *Home Sweet Home: American Domestic Architecture*, edited by Charles W. Moore, Kathryn Smith and Peter Becker. New York: Rizzoli, 1983, pp 84-89.
- McCune, Marty, Jerry Kyle, Morgan Rieder. "Harold Bell Wright Estates National Historic District National Register Registration Form." Tucson. 2010.
- McPherson, E. Gregory and Renee Haip. "Emerging Desert Landscape in Tucson." *Geographical Review*, Vol. 79, No. 4, Oct. 1989. pp. 435-449.
- Modern Architecture Preservation Project--Tucson. website: <a href="http://capla.arizona.edu/mapptucsonorg/">http://capla.arizona.edu/mapptucsonorg/</a>.
- Nequette, Anne M. and R. Brooks Jeffery. *A Guide to Tucson Architecture*. Tucson, Arizona: University of Arizona Press, 2002.

- Neumann, Christina, and Bob Vint. *Southwest Housing Traditions: Designs, Materials, Performance*. Housing and Urban Development 2005.
- Ryden, Don W., Debora M. Parmiter and Doug Kupel. "San Clemente Historic District National Register of Historic Places Registration Form, Phoenix. 2002.
- Ryden, Don W., Debora M. Parmiter and Doug Kupel. "Catalina Vista Historic District National Register of Historic Places Registration Form." Phoenix. 2003.
- Subdivision Design Standards and Procedures. Tucson, Arizona: Tucson City-County Planning Department, 1956.
- Sunset Books & Magazine Editors. *Sunset Houses for Western Living*. Menlo Park, California: Lane Publishing Company, 1947.
- Sunset Books & Magazine Editors. Western Ranch Houses by Cliff May. Menlo Park, California: Lane Publishing Company, 1958.

# **APPENDIX**

The following field guides were developed as reference material for student researchers, to assist in the identification of architectural styles and landscape types.

#### transitional ranch

timeframe: 1940s - early 1950s plan: small, simple floor plan

roof: gable, hip roofs; sometimes multiple roof forms; medium pitch

(3:12) roof; asphalt shingles most common material

exterior walls: painted block exterior walls; painted brick less common

windows: steel casement windows, usually with divided lights; rectangular

configuration

carport: single car; often detached

notes: smaller houses, limited or no overhanging eaves, wood siding often

as secondary material on gable ends; forms reflected influence of previous styles, including bungalow, cape cod (related to 'FHA

minimum' and 'minimal traditional' concepts)

example subdivisions: Frontier Village, Linden Park



## ranch (tucson)

timeframe: 1940s - late 1960s

plan: elongated rectangular floor plan most common; typically broad side

parallel to street; transverse orientation less common

roof: simple gable roof with low slope most common, hip roof less

common; low or medium pitch; asphalt shingles most common for highly visible (steeper sloped) roofs; built-up roof typical for low-

slope roofs

exterior walls: brick, burnt adobe most common; painted block in late 1940s and

early 1950s; slump block in 1960s

windows: steel casement (1940s and early 1950s); aluminum horizontal

sliding (mid-1950s onward); rectangular configuration

carport: integrated, typical; 1 or 2 car; some garages in 1960s

notes: houses generally have a horizontal character

example subdivisions: Colonia Allegre, Yale Estates, Terra Del Sol, Estes Park



# ranch, thematic variation (spanish colonial, colonial revival, storybook, character)

timeframe: 1940s - early 1970s

plan: rectangular floor plan; typically broad side parallel to street

roof: gable or hip roof most common, but wide variation in roof forms;

spanish colonial has tile roof; others have asphalt shingle or built-

up roof

exterior walls: brick, burnt adobe, stucco, wood siding

windows: steel casement (1940s and early 1950s); aluminum horizontal

sliding (mid-1950s onward); rectangular configuration

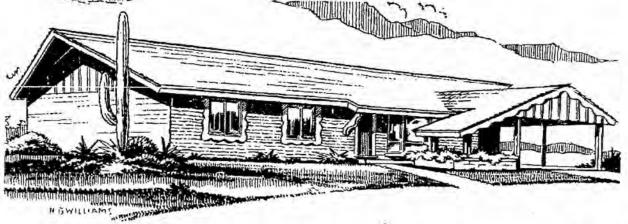
carport: integrated, typical; 1 or 2 car

notes: forms, decoration or details of theme usually applied to the surfaces

of the ranch style, including roof materials, fascia and window trim

example subdivisions: Enchanted Hills, El Cortez Heights, Braewood Terrace





#### modern ranch

timeframe: 1940s - early 1970s (uncommon after early 1960s)

plan: elongated rectangular plan common, but wide variation; transverse

orientation also common

roof: flat, shed or gable roof, or in combination; typically low-slope (2:12

or less); built-up roofing

exterior walls: brick, burnt adobe; painted block (1940s) and slump block (1960s

and 1970s) less common; wood siding rarely used

windows: steel fixed and casement (1940s and early 1950s); aluminum fixed

and horizontal sliding (mid-1950s onward); wood-framed fixed in combination with aluminum; wide variation in configuration-- large windows, floor-to-ceiling window walls, ribbon windows, gable-end

clerestory

carport: integrated, typical; 1 or 2 car

notes: wider variety of forms; transverse orientation more common than in

other building types; construction often 'systematic' -- a composition

of discreet elements; often identified as 'contemporary' in

preservation contexts

example subdivisions: Country Club Manor (17th, 18th and Eastland Streets),

Windsor Park



#### territorial ranch

timeframe: late 1960s - late 1970s

plan: rectangular, elongated floor plan; broadside parallel to street roof: flat, not visible; typically hidden behind parapets, but may include

portions with projecting eaves over carport or entry

exterior walls: parapet wall construction of slump block typical; some burnt adobe

windows: rectangular or arched window openings; aluminum horizontal

sliding windows

carport: carports or garages, 2 car; carport typically projects forward from

house

notes: decorative masonry details at wall cap, windows and entry are

common

example subdivisions: Darling Heights, Hearthstone Hills



# pastoral landscape

timeframe: 1940s - 1960s

character: lush, green, shade--large shade trees, lawns, hedges; semi-formal

plantings: lawn, aleppo pine, privet; accents include juniper, palm

ground cover: lawn driveway: n/a

notes: water intensive, originally reflected eastern or midwest landscapes;

this landscape has largely disappeared; most lawns have been

replaced with decorative gravel

example subdivisions: Winterhaven





## mediterranean landscape

timeframe: 1940s - 1960s

character: moderately lush--decorative plantings; plants tend toward gray-

green in color; moderately informal

plantings: wide variety including broadleaf plants (citrus, privet, oleander,

etc.), palm, aleppo pine, juniper, cyprus, olive

ground cover: lawns (original), decorative gravel

driveway: n/a

notes: water intensive, originally reflected california landscapes; most

lawns have been replaced; in some locations, native sonoran plants

are also part of the plant pallette; these landscapes have often

evolved toward a mediterranean-sonoran hybrid

example subdivisions: Poet's Corner, Kingston Knolls, Clara Vista



## retained desert landscape

timeframe: 1950s - 1970s

character: natural desert, or hybrid of natural desert and infill plantings; some

subdivisions retained only limited ornamental species; gray-green

in color; informal

ground cover: native ground surface, decorative gravel

driveway: paving, configuration

notes: creosote is almost always an indication of retained desert, but is not

a requirement; other common species include palo verde,

mesquite, various cacti, ocotillo; in subdivisions with larger lots,

more natural vegetation was retained

example subdivisions: Richland Heights, Windsor Park, Rancho Perdido Estates,

Poet's Corner



# low maintenance landscape

timeframe: mid 1960s - 1970s

character: decorative rock ground planes with minimal plants; informal

ground cover: decorative gravel driveway: paving, configuration

notes: minimal water use; evergreen plants for minimal maintenance and

year-round appearance

example subdivisions: Darling Heights, Hearthstone Hills, Estes Park, Verde Vista

