WINDSOR PARK SUBDIVISION
Tucson, Arizona

DESCRIPTION

Summary Paragraph

The Windsor Park subdivision is located in east-central Tucson, Arizona and was constructed between 1961 and 1969. The subdivision was developed in three phases over 7 years. The primary character-defining features of Windsor Park are the regionally influenced Modern and Modern Ranch houses and native desert landscaping. Within the proposed historic district there are 128 residences, of which 70% are estimated to be contributing properties to the proposed district. Though some houses have been modified over the years, those modifications have not adversely impacted the overall character of the neighborhood. The subdivision is largely intact and retains and expresses its original character.

Narrative Description

Windsor Park is a subdivision of 128 houses that was platted in 1962 and built between 1961 and 1969. The subdivision was developed in three phases and includes a total of 128 houses.

Location

The Windsor Park subdivision is located in east-central Tucson, Arizona. Tucson is located in the southern portion of the state, approximately 60 miles north of the Mexican border, and is surrounded by the Sonoran Desert. The Santa Catalina Mountains are located approximately 6 miles north of the subdivision, and the Rincon Mountains are located approximately 7 miles to the east. The subdivision is in Section 3 of Township 14 South, Range 15 East of the Gila and Salt River Meridian.

The subdivision is located northeast of the intersection of Speedway Boulevard and Camino Seco adjacent to suburban residential and commercial developments, most of which were built between 1960 and 1980. At the time of construction, 1961-1969, the area was part of unincorporated Pima County. It was annexed into the City of Tucson in 1971.

Boundaries

The proposed Windsor Park historic district boundaries are defined primarily by the configuration of the original subdivision plats, except for the commercial properties located along the southern boundary of the development. At the southwest corner of the subdivision is the Calvary Church complex, a former retail center built in 1976 that was part of the original subdivision but is not included within the proposed historic district boundaries. The proposed district is surrounded by commercial properties and Speedway Boulevard to the south, Camino Seco to the west, Wrightstown Road to the north, and Desert Palms Park subdivision to the east.

The intersection of Speedway Boulevard and Camino Seco has small commercial developments on three corners, and a two-story apartment complex on the northwest corner. Close to the district are several other post-World War II subdivisions developed both before, during and after the construction of Windsor Park. Directly adjacent to the east, Desert Palms Park was platted and developed starting in 1960. The subdivision was developed as 1/4 acre lots which were sold to various home builders. South of Speedway Boulevard is the Eastern Hills subdivision of single family tract houses, which was platted in 1962. West of Camino Seco is the Hidden Hills subdivision, which was platted in 1969.

Neighborhood Layout

The Windsor Park development was laid out with limited access points and most residential front façades facing away from major arterials and the adjacent commercial properties. The primary entrance is located directly off of Camino Seco, and the subdivision is also accessed via Wrightstown Road and residential streets that connect directly to the adjacent Desert Palms Park subdivision. Streets are both rectilinear and curved and some terminate in cul-de-sacs. The layout follows the natural, though slightly altered, topography of the property and takes advantage of views of the Santa Catalina Mountains to the north by organizing most of the streets along the east-west axis. Some of the original desert flora remains intact.

A landscaped drainageway runs through the neighborhood and was included in the overall design. Alleyways provide access to the backyards of all houses, which are enclosed by concrete masonry walls.

The original neighborhood layout remains intact.

Streetscape

Windsor Park is characterized by asphalt-paved streets flanked by native desert and imported low-water use flora, including desert shrubs, cacti, creosote, ocotillo, palm, mesquite, palo verde, as well as some ornamental shrubbery. The streets were originally dirt roads that were compacted and oiled to minimize dust; the streets were paved with asphalt within a few years of construction. There are no curbs or sidewalks in areas that were developed in Windsor Park's first phase, but there are rolled curbs in areas developed during phases two and three. Front yards are usually covered in decorative gravel and typically have asphalt or concrete driveways. The original landscaping utilized decorative gravel and native desert plants, but the plantings were more spare than they are today. Homeowners have provided additional landscaping over the years, largely in keeping with the original native desert landscaping.

Individual houses are typically sited near the center of the lot. In the first phase of the development, each house was uniquely situated and was rarely placed parallel to the street. This provides an irregular rhythm to the streetscape. In the second and third phases, some houses were rotated on the property, but this was less common. Driveways and carports are located in the front or side of each house, though some carports have been modified over the years. The consistent scale and character of the houses, consistent landscaping, and use of

burnt adobe and slump block masonry create a sense of identity for the neighborhood, but there is no sense of repetition or uniformity.

The curving, discontinuous streets, desert landscaping and irregular placement of the houses give the neighborhood an informal, picturesque quality. The landscaping, low-profile houses, variation (in model, orientation and elevation) of each house, combined with the lack of curbs and sidewalks establish a modest, almost rural character to the neighborhood.

Although some carports have been enclosed and some facades have been modified, the streetscape retains its original character.

Land Use

Windsor Park is composed of single-family residences located on rectangular and irregularly shaped lots. Lots range in size from 1/4 to 1/2 acre. Most homes are centered on the lot with front yards landscaped with native desert, or decorative gravel with desert landscaping and supplemental low-water use trees. All houses have large, private outdoor spaces in backyards.

Residential Architecture

The houses in Windsor Park are a regional variation on mid-20th century Modern and Modern Ranch architecture. Most of the houses have a low profile, with asymmetrical compositions of simple geometric forms. The original houses ranged in size from 1600 to 2500 square feet.

All houses in Windsor Park share common characteristics. Burnt adobe and slump block masonry are the primary construction materials. Additional materials include board and batten wood sheathing and wood trim. Roofs are characterized by wood fascia boards and built-up roofing with polymer coating; most roof surfaces are not visible from street. The roofs were originally covered with decorative gravel, but these have all been removed over the years. All houses originally had a two-car carport that was enclosed on two or three sides. Many carports are independent building forms that project forward from the front of the house, though in some models the carport is integrated into the facade. All carports provide depth and spatial interest to the front of the house. Some carports have been converted to garages, while others have been enclosed and converted to interior space. The houses in the first phase originally had wood-framed window walls, with clear-anodized aluminum for horizontal sliding windows and sliding glass doors. Windows in the second and third phase were typically aluminum. At some houses, the windows have been replaced with vinyl-framed windows. Stucco has been applied over the burnt adobe in a few instances, undermining the historic character of these homes.

The neighborhood has a cohesive architectural character as a result of the limited range of architectural forms and materials. There are approximately 10 models in the subdivision. The variety of models, masonry materials and colors, carport placements, orientation options and paint colors bely any sense of repetition and provide most of the houses a sense of individuality.

STATEMENT OF SIGNIFICANCE

Summary Paragraph

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 primary character-defining features of the houses are the asymmetrical forms, burnt adobe and slump block masonry, window walls, carports, flat and low-slope gable roofs, board-and-batten sheathing, and the systematic construction. These forms are associated with local, national and international trends of the period. 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.

In the City of Tucson Historic Preservation Office's 2016 eligibility assessment report "Post-World War II Residential Subdivision Development in Tucson, Arizona 1945-1975" which evaluated nearly 400 subdivisions, Windsor Park was identified as a top tier candidate for listing on the National Register of Historic Places and a "highest priority" subdivision for the city's preservation efforts.

Narrative Statement of Significance

<u>Criterion C: Windsor Park Residences of Tucson, Arizona 1961 - 1969</u>

Mid-20th Century Modern Production Housing

In the years immediately after World War II, there was an incredible demand for housing in 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. 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 over the next decade 16 million new homes were built across the country. FHA financing 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 architectural range; economy of scale informed design. As housing developments moved further from urban centers, the rise in automobile

ownership helped to accommodate and foster these sprawling developments.

The vast majority of these post-war houses were built in the Ranch style. 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 rise in automobile ownership resulted in attached and integrated carports and garages. 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 labor-intensive construction (requiring skilled craftsmen) of period revival and craftsman styles and made Ranch houses an affordable choice for an expanding middle class nationwide. By the 1950s, it was the dominant style in single family residential construction.

Though the Ranch was the dominant building form, a small percentage of post war production 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, including Adolf Loos, Walter Gropius, Mies Van Der Rohe and LeCorbusier. According to the organization DOCOMOMO (Documentation and Conservation of the Modern Movement),

> the Modern Movement 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. Modern design was conscious of being modern: it purposefully expressed the principles of modern design. (docomomo-us.org)

The roots of the Modern Movement can be found in the Industrial Revolution of the late 19th and early 20th centuries, when tremendous advancements in engineering, materials, and construction techniques had a significant impact on design. New products, including steel, sheet glass, aluminum, and reinforced concrete allowed architects to envision the world in a whole new way.

In addition to changing technologies, new democratic institutions in Europe led to revolutionary ideas on how architecture should respond to the needs of the working class. Historical precedents were rejected as being associated with the aristocracies of the past; designers proposed that architectural problems should be solved by rational thought rather than through the implementation of pre-determined models. As a result, highly decorated styles were replaced with a reductive, utilitarian aesthetic. Population growth and a construction moratorium during World War I led to a tremendous post-war demand for low-cost housing and provided the

early modern architects an opportunity to implement their vision. Common architectural characteristics of the early European modernists were: simple, clean designs, the use of modern materials and technologies, an emphasis on geometric forms, asymmetrical compositions, functional planning, large expanses of glass, and an absence of ornamentation.

In the United States, Frank Lloyd Wright led an American version of the Modern Movement by using complex geometries, dramatic forms, dynamic spaces and horizontally-oriented asymmetrical compositions. In contrast to the Europeans, Wright used more traditional materials, was less controlled by function, and integrated more ornamentation into his work. European emigres Richard Neutra and Rudolph Schindler brought innovative Modern design to southern California in the 1920s and 1930s. Both architects had been trained in Europe and each worked briefly for Frank Lloyd Wright before starting their own practices. Neutra's work was closely related to the European emphasis on efficiency, space and light, while Schindler's work appeared as a hybrid of the European emphasis on space and light and Wright's emphasis on materiality. The contemporary and aesthetically related architectural movements of Art Deco and Steamlined Moderne were more widely applied and accepted in the 1920s and 1930s, and helped to lay the groundwork for the acceptance of Modern architecture in the United States. In 1932, an exhibition on the work of European Modern architects at the Museum of Modern Art in New York brought wider exposure of these new concepts to the United States. During the course of the 1930s, Modern architecture began to pop up across the country, primarily in custom houses.

In the 1930s, political turmoil in Europe and the rise of Fascism led many of Europe's Modern architects to emigrate to the United States; many, including Mies and Gropius, became educators in American universities where they helped to educate a generation of Modernists.

In the years following World War II, Modern design became the dominant force in commercial and institutional architecture in the United States; but the impact on residential design and production housing was much more limited, though it gained some traction in the west. Early FHA programs favored conventional construction systems, limiting public access to Modern design. Modern production housing largely started in southern California in the 1940s. Los Angeles architect Gregory Ain was one of the first designers of subdivisions featuring Modern houses. His Park Planned Homes (1946) and Mar Vista Tract (1947) in Silverlake were some of the first developments that proposed the mass production of Modern single family houses. The houses were modest but innovative and provided a new approach to affordable modern living. The designs reflected the work of Neutra (whom Ain worked for in the early 1930s) and Schindler. The Park Planned Homes development was designed in collaboration with noted landscape architect Garrett Eckbo for developer and builder Robert Kahan. The houses were characterized by projecting roof and wall planes, stucco, ribbon and clerestory windows, semi-detached garages and outdoor patio spaces. At Mar Vista, Ain collaborated with Joseph Johnson and Alfred Day on the designs for Advance Development Company's Modernique Homes. Eckbo again contributed to the landscape design. The single model at Mar Vista could be rotated on the site to present one of several facades to the streetscape, and was characterized by a low profile, projecting roof and wall planes, extensive use of glass, V-shaped columns framing the entry path, garages, stucco, and an open floor plan. Houses were distinguished by paint colors, orientation, and garage placement.

In 1947, the cooperative Mutual Housing Association began development of the Crestwood Hills subdivision in Brentwood, outside Los Angeles. The houses, designed by A. Quincy Jones, Whitney R. Smith and others, were groundbreaking examples of Modern design for tract housing and featured exuberant forms, large expanses of glass and redwood siding. More than a dozen models were created in order to meet a broad variety of members' needs and accommodate a variety of site conditions found in the hillside topography. The cooperative faced financial difficulties and as a result the development took many years to build out. 160 houses were eventually built.

In 1948, California developer Del Webb opened Pueblo Gardens in Tucson, Arizona. Webb envisioned Pueblo Gardens as a self-contained master-planned community, with schools, churches and a shopping center. The development was significantly larger than previous projects and included plans for 3000 houses. He hired California architects A. Quincy Jones and Paul Williams to design the subdivision and houses. The 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 and Webb abandoned the project in 1949 with only 750 houses built and more than 200 houses left unsold.

In 1949, developer Edward Hawkins and architect Eugene Sternberg created Arapahoe Acres outside of Denver. The architecture owed a debt to Frank Lloyd Wright and his Usonian design concepts for low-cost Modern houses. Most of the houses were custom homes, but many were variations on a few basic themes. Many of the houses were characterized by projecting horizontal roof planes, low profiles, asymmetrical forms, and brick, wood frame, or concrete masonry construction.

Joseph Eichler was among the earliest and most successful developers to embrace Modern architecture for production housing. Eichler had lived in one of Wright's Usonian houses, the 1939 Bazett Residence, which he said inspired him to build "contemporary houses for sale to the person of average income." (Adamson) Working with the architecture firms of Anshen and Allen and Jones and Emmons (A. Quincy Jones began a partnership with Frederick Emmons in 1950), he developed a vision of modern living in planned communities for the American middle class. His neighborhoods often featured parks and community centers. Most of his early work was located in three communities south of San Francisco: Sunnyvale, Palo Alto and Menlo Park. Eichler built his first Modern houses with Anshen and Allen in the Sunnyvale Manor II subdivision in 1950, and he first collaborated with Jones and Emmons in 1951; he worked closely with both firms over a 15 year period to define and refine this vision.

Eichler's architects were tasked with designing houses that fostered a sense of freedom and livability, while at the same time minimizing construction and development costs. This balancing act between quality of life and economy drove significant innovation in the Eichler designs. Out of this process developed a number of innovations, including post-and-beam construction, the transverse gable roof, and an efficient construction process that included some prefabricated

components. While the Ranch house relied on simplifying building forms to reduce costs, Modern tract houses simplified individual building elements and the material interfaces to reduce costs. This concept had the advantage of allowing designers great flexibility to configure these components into a wider variety of simple or complex compositions to achieve their of goals.

The Eichler houses were characterized by post and beam construction, which reduced construction time, minimized costs and provided great planning flexibility (in comparison to masonry bearing wall construction); large window walls, which provided substantial daylight and ventilation; articulated roof planes in a variety of forms, including flat, shed, and gable; and non-structural wood or masonry infill walls. The designs also emphasized patterns expressed in the structure, wood sheathing and window mullions. Jones introduced the transverse gable roof--where the ridge line of the roof is perpendicular to the street--and combined it with a gable-end wall of glass to allow more daylight into the house. The shift to using the gable-end wall to connect to the exterior was an important one; the primary axis of the space was perpendicular to convention and parallel to the ridge line of the roof, which had the advantage of allowing the entire space to extend outward, and the roof structure would draw the eye horizontally to the exterior rather than downward. It also allowed more daylight to reach deeper into the interior of the house and provided greater continuity between interior and exterior space.

The construction efficiencies that evolved out this collaboration between architect and builder allowed Eichler to produce 500 houses a year. Eichler continued to build houses into the 1960s, and eventually built more than 10,000 Modern houses. His work became the gold standard for mid-century Modern residential development in the country.

Although Modern architecture and the Ranch house had evolved and developed independently, they shared fundamental values about living in the 20th century: the houses were functional and eschewed pretense, emphasized access to daylight and ventilation, and embraced outdoor living. As a result, there was a great deal of cross-fertilization between the two movements, especially in the production housing market, where innovation in the name of sales often trumped any sense of categorization or purity of form. By the early 1950s, designers had created a hybrid of the two, and the Modern Ranch was born. Modern architecture had limited appeal in its purist forms but found greater acceptance in residential design by introducing Modern concepts into more traditional ranch forms and materials. This concept of integrating vernacular or traditional forms with Modern architecture has also been referred to as ”situated Modernism.”

Southern California builder Cliff May had been one of the pioneers in developing and disseminating the Ranch concept for residential design and construction. His primary focus was on custom houses, but in the late 1940s he began experimenting with the ranch concept, importing forms and ideas from Modern architecture. In the early 1950s May and his partner, Chris Choate, began developing low-cost model home designs for production housing. These houses focused on the functional issues of modern living more than the character of the ranch house; affordability and livability shaped design, rather than form and façade. But the gable

roofs and low profile identified these houses as still part of the Ranch tradition. The houses emphasized efficient floor plans, flexible spaces, large window walls, indoor-outdoor living and simplified post-and-beam construction to minimize costs. in a further effort to keep costs down, wood construction was utilized for walls rather than masonry and gypsum board was often used as an interior finish material in lieu of wood or plaster. They offered the plans to builders around the country. They also offered, for a brief period, prefabricated components that were delivered directly to the building site for quick assembly. Estimates suggest that more than 18,000 of these houses were built across the country, primarily in warmer climates.

In the mid-1950s, the architecture firm Palmer & Krisel emerged as one of the most innovative designers of Modern and Modern Ranch production housing in the country. Building upon May and Choate's concept, they developed exceedingly efficient designs that were popular with home buyers. The firm also developed construction methodologies--including prefabrication of some components--that led many builders in southern California to abandon the Ranch house in favor of their Modern Ranch designs. Their work was characterized by post-and-beam construction, independent carport structures, extensive glazing, ribbon windows, clerestory windows, window walls, stucco and wood sheathing. Their work was so popular with the home building industry that at one point, according to Krisel, 7 of the 10 largest homebuilders in the country were their clients. Of particular note was their work with the Alexander Construction Company in Palm Springs, which was characterized by inventive concrete masonry detailing and distinctive roof lines. They received the National Association of Home Builders Award of Merit seven times between 1956 and 1959 for their residential designs. The architects designed models for more than 70 subdivisions in places as far away as Florida, and were responsible for more than 20,000 houses in a ten year period.

In Arizona, architect Ralph Haver designed hybrid houses for many Phoenix area subdivisions, starting with the Marlen Grove development in 1952. Haver's designs for production housing became more Modern over time as the forms became more acceptable to financing institutions and the general public. Marlen Grove was characterized by painted concrete masonry construction, transverse gable roofs and gable-end window walls, attached carports, and closely spaced structural columns forming a contrasting vertical pattern to the generally horizontal building forms.

Custom residential design also had an impact on Modern production housing. Experimentation in custom houses often led to innovation that was transferable to mass produced housing. Architects were designing in both categories and the distinctions between the two classes of housing were often ambiguous. Both categories received wide publication in both popular magazines directed at homebuyers and trade publications geared to professionals.

The primary concepts common to most Modern and Modern Ranch production houses included an emphasis on:

- livability and functionality
- flexibility
- informal spaces
- unpretentious facades

· indoor-outdoor living and landscape design
· privacy at the front of the house
· large windows or window walls
· maximizing access to landscape, daylight and ventilation
· low-profile roofs
· single story houses with an emphasis on the horizontal character of the buildings
· little or no distinction between indoor and outdoor materials
· post-and-beam construction (in Arizona there was an emphasis on masonry walls).

Mid-20th Century Modern Production Housing in Tucson

Prior to World War II, Tucson's architectural expression was largely defined by the revival of historical styles, and particularly those associated with a romantic image of the Southwest, including Spanish Colonial, Mission, and Pueblo. Residential design was also largely influenced by Craftsman and Bungalow forms. In addition, during the late 1930s in the wake of the Great Depression, there was a trend towards stripped-down and simplified building forms, particularly for lower and mid-priced housing.

Like many cities in the Southwest, the Tucson region grew exponentially after World War II from a population of less than 70,000 in 1940 to more than 250,000 in 1960. Moreover, the Depression and World War II created a local housing shortage and Tucson had few architects to satisfy the demands of its expansive growth. The arrival of Modern architecture in Tucson during this post war boom can largely be attributed to three prolific architects: Arthur Brown, William Wilde, and Nicholas Sakellar. Their award-winning and nationally published works were responsible for attracting young design professionals to the desert, creating a subsequent generation of architects immersed in the principles of the Modern Movement.

As in the rest of the country, the Modern Movement had a significant impact on commercial and institutional architecture in Tucson, but its impact on residential design was more limited. Architects were designing Modern custom houses as well as model homes for builders, but this was a small fraction of total production. Most large-scale production homebuilders were building conventional suburban Ranch houses, while most speculative custom builders were building larger Ranch houses that were influenced by traditional building materials and forms.

Most production housing in Tucson was built in the Ranch style. Of the more than 300 subdivisions that were developed between 1945 and 1975, less than 10% reflected the influence of the Modern Movement in their exterior character. Only a handful of local builders embraced Modern architecture, and most of these houses were hybrids that integrated Modern architecture with the Ranch style. The designs in the Modern and Modern Ranch subdivisions emphasized the use of asymmetrical forms and dynamic space planning, innovative materials, flat, shed or low-slope gable roofs, and large window walls that reinforced indoor-outdoor living.

Modern production housing in Tucson started with four entry-level housing projects in the late 1940s: Tucson Heights, Country Club Manor, Pueblo Gardens and Freedom Village. The Tucson Heights project, built in 1946-47, evolved out of the need to provide affordable housing for the influx of returning veterans. The project was built by Paul Broman and the Great Western

Construction Company. Architects Blanton and Cole designed four floor plans for the project and offered several elevations for each plan. The small houses were low-profile compositions of simple rectangular forms and planes, flat or low-slope roofs, large windows and window walls, and white-painted concrete masonry walls. 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. The project was the result of a public campaign in support of housing for returning veterans, and received national recognition as one of the first projects of its kind in the country.

M. M. Sundt Construction built 100 houses in the Country Club Manor subdivision in 1947 for returning veterans. The houses were designed by Arthur Brown, one of Tucson's most influential Modern architects. The houses were all variations on a single floor plan. Brown designed the plan so that it could be rotated on the lot to provide four alternative street elevations; by mirroring the plan, 8 distinct elevations could be created. This had the additional benefit of avoiding the appearance of repetition that was a primary drawback of mass produced housing. The houses were characterized by brick construction, flat and low-slope gable roofs, large windows, and attached carports.

Freedom Village, located several miles southwest of downtown, was developed by Freedom Homes and designed by William and Silvia Wilde in 1948. The houses emphasized privacy from the street while providing a large window in the back of the house. They were characterized by flat roofs, corner windows, white painted concrete masonry or stucco, and a detached garage located toward the back of the property.

In the summer of 1948, developer Del Webb opened the highly publicized Pueblo Gardens development southeast of downtown. Webb was a California developer and nationally known figure, and he envisioned Pueblo Gardens as a self-contained master-planned community, with schools, churches and a shopping center. The development was significantly larger than Freedom Village or Country Club Manor, and was intended to include 3000 houses. Webb hired California architects A. Quincy Jones and Paul Williams to design the subdivision and houses. Jones was the primary designer and implemented concepts that would later evolve and emerge more fully in his work for developer Joseph Eichler. As noted previously, Eichler was one of the country's leading builders of Modern production housing, and Jones would eventually become one of the premier architects in southern California. The Pueblo Gardens houses were characterized by wood frame construction, and had open floor plans, floor-to-ceiling windows, shed and gable roofs, and were sheathed with redwood siding or stucco. 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.

In the late 1940s and early 1950s, subdivisions that sold individual lots, such as Winterhaven and Broadmoor, gave small homebuilding companies the opportunity to explore and develop design concepts that they would apply later in larger developments.

In the early and mid-1950s, the Lusk Corporation achieved great success in developing mid-priced housing projects on Tucson's expanding east side. The company embraced Modern design principles in several developments, beginning with several models in the Highland Vista subdivision. The Lusk Corporation was the only builder in the country to receive the National Association of Home Builders Award of Merit for six consecutive years, five of which were awarded for Tucson-based development projects, including Highland Vista, San Rafael Estates and Indian Ridge Estates. 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.

In the late 1950s, the Lusk Corporation moved away from an emphasis on design, and focused on lower price points and larger production volume to increase profits. The company expanded its operations nationwide and quickly became one of the largest homebuilders in the country. Their local developments still offered houses with some residual Modern appearances, but most of the work was far less distinctive and reflected the surface application of forms rather than the integration of Modern living concepts. Subdivisions included Kingston Knolls, Glen Heather, Desert Steppes and Suffolk Hills.

In the mid- to late 1950s, a clear pattern emerged among other large scale homebuilders trying to repeat the success of the Lusk Corporation. These homebuilders would offer a Modern or Modern Ranch model home among the several models usually offered in a development. But few of these models were put into production on a large scale. Other builders made gestures that could be applied superficially to the standard ranch house, but rarely deviated from the Ranch form. Some builders, such as Busby Carroll in the Villa Rey section of the Miramonte Terrace subdivision, emphasized the surface application of Modern materials or forms to give a Modern or contemporary appearance, but without the implementation of characteristics that facilitated modern living. In other subdivisions, such as Vista Del Sahuaro, the street character was defined largely by the Ranch style, while behind this facade were Modern forms, such as large window walls. There was a great deal of cross-fertilization between Modern and Ranch forms.

Starting in 1955, the Tucson Home Builders Association began sponsoring a Parade of Homes to promote the industry and showcase new housing concepts. Members would feature new designs and innovative features and equipment intended to simplify modern living. During the course of the 1950s, most houses in the Parade of Homes were built in the Ranch style, but a few models were invariably Modern, as builders tried to distinguish themselves from one another. Builders would hire notable architects, and designs would integrate modern forms, materials and details, but these designs were rarely reproduced in any significant quantity. 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. The concept houses were often Modern in character or influenced by Modernism. Concept houses included the “House for All America,” the “Idea Home,” and the “Space Planner;” local builders and architects would create a regionally appropriate variation on the house concept. The Lusk Corporation had great success with the “House for All America” and the “Idea Home” in their San Rafael and Indian Ridge subdivisions. Competitions sponsored by national magazines and industries were also used to promote local homebuilders. Federal Development Corporation and architects Scholer and Fuller won an award from *Parents* magazine for their Madero design in Vista Del Sahauro, while Abril Construction and architects Cook and Swaim won the Horizon Homes competition sponsored by the Portland Cement Association. Herbert Oxman and architects Ambrose Swanson received the accolade “Best Home for the Money” from *American Home* magazine for two models in the Orange Grove Valley and Windsor Park subdivisions.

In the mid to late 1950s, a handful of small homebuilders were also offering designs that emphasized Modern architecture. Most of these builders, including Copeland Construction, Strunk Construction, Paul Buehrer, William Merodias, Lester Pritchett and Tom Gist, were producing a limited number of houses in developed subdivisions. The designs were usually hybrids of Modern architecture and the Ranch style.

The void left by the Lusk Corporation went largely unfilled until the architecture firm of Ambrose, Swanson and Associates emerged in 1958. Ambrose and Swanson’s design work was innovative, cost effective and usually reflected the influences of both the Ranch style and the Modern Movement. The houses in Sambee Gardens for Beauty-Built Homes and the houses in Orange Grove Valley 1 for Maslow Construction were early examples. The designs for Sambee Gardens and Orange Grove Valley both implemented large window walls and systematic construction into the Ranch form.

In 1959, Busby-Carroll Construction opened the Park Ridge section of their Miramonte Terrace subdivision in east Tucson, and introduced the Flair subdivision on Tucson’s northwest side. The developments featured model homes designed by Palmer & Krisel, a nationally recognized architecture firm based in southern California. One of their models was recognized by *House and Home* magazine as a “Trendsetting Home,” while another had received an Award of Merit from the National Association of Home Builders. The models featured concrete masonry construction, including extensive use of decorative concrete masonry. The houses were characterized by ribbon windows along the front of the house, dynamic open floor plans, gable-end clerestory windows, a large window wall opening onto the back yard patio, and an expressed structural system. The carports were prominently featured and articulated with distinctive roof forms and details. Other models, designed by local architect Carl Lemar John, featured some surface application of the Modern character of Palmer & Krisel’s work and dynamic roof forms, but did not include the conceptual underpinnings of Modern living. The houses in Flair did not sell very well, likely in part because of the location.

In 1960, Signature Homes introduced Shibui, a series of high-end production houses intended for construction on one acre lots in Casas Adobes Estates. Designed by Nicholas Sakellar, these elegant houses were an attempt to introduce high-style Modern design to the production

housing market. The designs were heavily influenced by regional forms and materials, and were characterized by parapet wall construction of stucco, decorative concrete masonry, burnt adobe and/or rubble stone, expressed wood beams, stylized carports, large window walls, and an emphasis on outdoor patio spaces. Only a handful of these homes were built.

In 1961, Herbert Oxman hired Ambrose and Swanson to design the models for his new Windsor Park development in east Tucson. Oxman was targeting a mid-priced homebuyer, which offered Ambrose and Swanson an opportunity to design for a higher price point than they had in their previous work, and as a result, the quality of the designs were significantly improved. The Windsor Park houses were perhaps the best examples of Modern design for large scale production housing in Tucson. The houses were characterized by simple and unadorned asymmetrical forms, low-profile roofs, burnt adobe, large window walls, and systematic construction. Oxman expanded the Windsor Park development in 1965 with Windsor Park II, and again in 1968, with Windsor Park III. Swanson designed the models in the subsequent developments after he and Ambrose ended their partnership in 1963.

Estate Development Corporation attempted to build on the success of Windsor Park and used the Windsor Park 3-bedroom model home design for their 1965 Tucson Park West subdivision on the opposite side of the city. Only a few of these models were ever built. Yale Construction also tried to take advantage of the success of Windsor Park by hiring Ambrose to design a model home similar to the models at Windsor Park for their work in the Orange Grove Valley subdivision on the far northwest side of the city. Again, few of these houses were built.

Oxman continued to build Modern-influenced houses in his Tanque Verde Terrace development in the early 1970s. The houses were designed by Earl Kai Chann, and were in part a vestige of the designs at Windsor Park. However, changes in the market limited Oxman's ability to offer a distinctive product and many of the qualities that had distinguished Windsor Park were not included.

There was little other Modern production housing built in Tucson during the course of the 1960s and 1970s. The ranch house still dominated production housing, but was beginning to evolve and transform.The Territorial Ranch, a hybrid of the Ranch style and parapeted wall forms from Arizona's past (including Territorial, Sonoran, and Spanish Colonial forms), was emerging as a popular building form for residential design. By the early 1970s, the Modern influence had all but disappeared from production housing. One notable exception was the work of Bilmar Builders at Berkshire Terrace, designed by architect Robert Swaim. The houses integrated a modern character into the Territorial Ranch concept.

The earliest Modern production houses in Tucson in the 1940s had typically been small houses with flat roofs in white-painted masonry, stucco or brick. In the 1950s, the houses tended to be slightly larger, influenced by regional and ranch forms, in brick or burnt adobe, with large window walls, and shed or gable roofs. By the 1960s, the houses were targeted at higher income buyers, and took on a regional character with flat or transverse gable roofs, burnt adobe or slump block, and large window walls. The common character-defining features of mid-20th century Modern production housing in Tucson include:

- asymmetry: front elevation a composition of forms
- windows: large window walls, infill panels, gable-end clerestory windows
- roof type: low slope gable, flat, shed, transverse gable
- roof construction: built-up, with or without decorative gravel
- construction materials: burnt adobe, brick, concrete block, slump block, decorative concrete masonry, wood roof framing, wood board-and-batten sheathing.

Developments that reflected the influence of the Modern Movement include:

Project/Subdivision	**Start Date**	**Builder/Developer (Designer)**
Tucson Heights	1946	Paul Broman/Great Western Construction Co. (Blanton and Cole, Architects)
Country Club Manor (17th, 18th, Eastland Streets)	1947	Sundt Construction (Arthur Brown, Architect)
Pueblo Gardens	1948	Del Webb (A. Quincy Jones and Paul Williams, Architects)
Freedom Village	1948	Freedom Homes (William and Sylvia Wilde)
Highland Vista	1952	Lusk Corporation (Anne Rysdale, John Sing Tang, Arthur Rader, Gay Johnston)
Rosedale Acres	1954	East Tucson Builders
Villa Serena	1954	Lusk Corporation (Arthur Rader)
San Rafael Estates	1954	Lusk Corporation (Arthur Rader, Robert A. Little)
Leonora Addition	1954	Tom Gist (Gist)
Cliff May Homes	1954	Lloyd Fuller Construction Co. (Cliff May)
Trend Homes (Wilshire Heights, Sharon Addition, San Fernando Village, Mesa Village, Milburn Manor, Loma Linda)	1952-65	Paul Buehrer (Buehrer)
Indian Ridge	1955	Lusk Corporation (Arthur Rader)
Mitman Addition (Rosewood, 3rd, 4th, 5th and Baker Steets)	1955	Copeland Construction (Bernie Friedman)
Indian Crest	1956	Lusk Corporation (Arthur Rader)
Warsaw No. 2/Hayhurst St.	1956	Strunk Construction
Indian Ridge Terrace	1957	Lusk Corporation (Arthur Rader, William Krueger)
Glen Heather	1957	Lusk Corporation (Arthur Rader, William Krueger)
Kingston Knolls	1958	Lusk Corporation (Arthur Rader, William Krueger)
Suffolk Hills	1958	Lusk Corporation (Arthur Rader, William Krueger)
Golf Links Addition	1958	Albert Strasner (Arthur Rader)
Sambee Gardens	1959	Beauty-Built Homes (Ambrose, Swanson & Assoc.)
Miramonte Terrace (Park Ridge, Villa Rey)	1959	Busby-Carroll (Palmer and Krisel, Carl Lemar John)
Flair	1959	Busby-Carroll (Palmer and Krisel, Carl Lemar John)
Sherwood Village (including Desert Steppes and Cloud Ridge)	1959	Lusk Corporation (Arthur Rader, William Krueger)

Signature Homes/Shibui	1960	Signature Homes (Nicholas Sakellar)
Orange Grove Valley I	1960	Maslow Construction Corporation (Ambrose, Swanson & Assoc.)
Rose Hill II Resub.	1960	Jack Young Development (Ambrose, Swanson & Assoc.)
Windsor Park	1962	Herbert Oxman (Ambrose, Swanson & Assoc.)
Windsor Park II	1965	Herbert Oxman (David Swanson)
Windsor Park III	1968	Herbert Oxman (David Swanson)
Tanque Verde Terrace	1971	Herbert Oxman (Earl Kai Chann)
Tanque Verde Terrace II	1972	Herbert Oxman (Earl Kai Chann)
Berkshire Terrace	1974	Bilmar Builders (Robert Swaim)

The Development of Windsor Park

The Windsor Park subdivision was developed as part of the fast-paced, post-World War II eastward expansion of Tucson.

Herbert Oxman was a New York builder and developer who moved to Tucson in 1961. In that same year he and his company, Meadowlane Estates Corporation, purchased and platted 40 acres of land east of Tucson (on the northeast corner of Speedway Boulevard and Camino Seco) for the Windsor Park subdivision. The property had originally been part of the 1928 homestead of Joseph W. and Helen L. Rowen. The subdividing of former homesteads and farmland on the outskirts of Tucson was a standard practice for suburban residential development throughout the eastward expansion of the city. By the end of 1961, the property had been rezoned, platted and subdivided, and construction was underway on two mid-priced model homes near the southeast corner of the development.

Oxman selected the property for the desert landscape, mountain views, and the high topography which protected the views of the Santa Catalina Mountains to the north. He may have also selected the property because it was more than three miles from Tucson's city limits, which meant that the development was not required to meet the City of Tucson's standards for zoning or building codes. State law required that plans for subdivisions located within three miles of a city's municipal boundary must be submitted to that city for review. By developing properties beyond the three mile limit, subdivisions could be established and houses constructed with minimal regulatory oversight. This was a common practice in the Tucson home building industry.

Oxman's company managed all phases of development, including planning, platting, construction, and sales. He contracted with Maddock and Associates to prepare the subdivision plat. The neighborhood reflected contemporary post war suburban planning trends, with minimal access points, discontinuous, rectilinear and curved streets, T-intersections and cul-de-sacs. This layout, combined with the large lots, irregular orientation of the houses, native vegetation, and lack of curbs or sidewalks gave the subdivision an informal quality and somewhat rural character. Though the houses appear to be randomly situated on the lot they were often oriented intentionally to create an irregular streetscape, take advantage of mountain views, or minimize solar heat gain.

Oxman hired the architecture firm of Ambrose, Swanson and Associates to design two new model homes. Ambrose Swanson had found success designing model homes and were in high demand by Tucson's production homebuilders at the time. The houses were Modern, but intentionally informal and understated, with asymmetrical and low profile forms that reflected the informality of modern living. The Modern character of the houses was distinctively different from other production housing on the market in Tucson at the time, and filled a niche that had gone largely unfilled for several years.

Oxman hired David Weiner of the Weiner Co., a public relations firm, to handle marketing for the development. Weiner's marketing created a public persona for Oxman and highlighted the innovative and distinctive Modern designs, quality of construction, large lot size, natural desert landscape, and the views of the Catalina Mountains. Oxman and Weiner recognized the unique designs as a marketable asset that distinguished Windsor Park from competitors. The original landscaping consisted largely of native desert; Oxman preserved substantial portions of the native vegetation and only cleared the land as necessary. The subdivision's proximity to the Tucson Home Builders Association's 1962 and 1963 Parade of Homes in the nearby Desert Palms Park subdivision also provided substantial exposure for the Windsor Park models.

In 1963 *American Home* magazine published an article on the three-bedroom model, awarding it the title of "Best Home for the Money." The house was also published in early 1964 by *Practical Builder* magazine, which lauded the design as "a standout for desert regions" and recognized the effort by the designers to "bring the outdoors inside." Oxman utilized both plaudits extensively in his advertising.

There were two primary models in 1962 (including a 3 bedroom and 4 bedroom model), but Oxman introduced additional models in 1963 and 1964 that were variations on the original design concepts. A split-level model was added in 1965. These later models were designed by architect David Swanson, after the partnership of Ambrose and Swanson dissolved in 1963. Oxman emphasized customization and would often modify plans to suit a buyer's needs.

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 into bankruptcy. Oxman weathered the decline, and managed to sell 14 houses in Windsor Park in 1962, 20 in 1963, and 9 each in 1964 and 1965.

Windsor Park was largely completed in 1965, but the subdivision was just the first phase of the larger Windsor Park development. In 1965, Oxman established Windsor Park II, which expanded the development northward onto 20 additional acres. Oxman opened Windsor Park III in 1968, expanding the development by another 10 acres. Larger houses and additional models were built in each subsequent phase. All three phases totaled 128 houses and were completed in 1969. The City of Tucson annexed the subdivision in 1971.

The Windsor Park Houses

The Windsor Park houses were a reflection of popular national trends. The houses were influenced and shaped by several factors: the Modern Movement, the California suburban ranch house, regional forms and materials and a consideration of local climate conditions and view sheds. The result was a distinctive regional interpretation of the mid-century Modern house.

Most of the houses were compositions of two or three primary geometric forms, and had clean lines, simple construction details and no applied ornamentation. The houses were covered with low-slope gable or flat roofs. Primary building materials included burnt adobe or slump block masonry for walls, redwood board and batten sheathing, wood roof framing and fascias, and large wood and aluminum window walls. The use of burnt adobe made the houses a distinctly Tucson product. Wood rafters and tongue-and-groove decking were exposed in the interior living spaces of some of the houses, and wood rafters were also exposed in carports, patios, and eaves. In some models, the carport was an independent structure, which afforded great flexibility in situating the houses on irregular lots. In a few instances, the carport was detached from the rest of the house.

The primary character-defining features of the Windsor Park houses include:

Asymmetrical Composition of Forms--Most of the Windsor Park houses were asymmetrical compositions of two or three geometric forms. This resulted in more formal complexity on the street facade. A few later models had simpler elevations with integrated carports, but were still asymmetrical.

Burnt Adobe--In the early 1950s, burnt adobe became the predominant wall construction material for mid-priced tract housing and custom homes in Tucson. The appearance is similar in size and shape to traditional adobe, but the color is brick red or rust orange. The color similarity to brick provided homebuyers a material that was familiar but also had a distinctive southwestern character. Burnt adobe was the predominant construction material in the first phase of Windsor Park, but was less common in phases two and three. (For more information see “Burnt Adobe and Slump Block Masonry” below).

Slump Block--In the late 1950s slump block concrete masonry was introduced by masonry suppliers and local homebuilders to compete with the burnt adobe that was imported from Mexico. Slump block was designed to have a character similar to burnt adobe, but with the benefits of concrete masonry construction. Only a few houses in the first phase of Windsor Park were built with slump block, but in Windsor Park II and Windsor Park III it was the primary wall construction material. (For more information, see “Burnt Adobe and Slump Block Masonry” below.)

Projecting, Low-Profile Roof --A low-profile flat roof with broad eaves was typical for many of the houses at Windsor Park. The flat roof eliminated the visibility of the roof surface and minimized its impact on the appearance of the house. This was important because the aesthetic quality of inexpensive roofing choices was limited. The limited visibility of the roof allowed Oxman to install a built-up roof that was generally less expensive than other roofing materials. The low

profile and the expressed roof line also helped to emphasize the low-slung character of the house, while projecting eaves provided shade for the large windows. Oxman emphasized the wider eaves at Windsor Park in his marketing materials as providing better shade for the walls of floor-to-ceiling glass. Several models had a mix of flat roofs with projecting eaves and parapet walls.

Transverse Gable Roof--Also referred to as a 'transverse ranch', the transverse gable roof sets the roof ridge line perpendicular to the front elevation of the house. The transverse orientation combined with the low roof slope (1:12) limited the visibility of the roof surface from the street. 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. In addition, the low-slope made it easier to install a low cost built-up roof with gravel. Projecting eaves at Windsor Park were wider than convention to provide greater solar control for the large walls of floor-to-ceiling glass.

The transverse orientation provided the opportunity to use a gable-end wall of glass to connect the interior living spaces to the backyard. The primary axis of the space was perpendicular to convention and parallel to the ridge line of the roof, which had the advantage of allowing the entire space to extend outward, and the roof structure would draw the eye horizontally to the exterior rather than downward. There was little distinction between interior and exterior materials, and masonry walls and wood beams extended outward past the glass wall to reinforce the indoor-outdoor connection. Large sliding glass doors and windows provided significant cross ventilation and daylight. The wood posts, beams and rafters were exposed and painted a contrasting color to articulate and highlight these linear elements and help to draw the eye to the exterior. This created greater continuity between interior and exterior space. (see "Window Wall" below.)

Window Wall--The earliest houses at Windsor Park had two or three large floor-to-ceiling window walls that span the entire width of a room. The window walls were designed to reinforce indoor-outdoor living by providing extensive daylight and both visual and physical access to the exterior, and take advantage of mountain views where possible. The top of the window wall was continuous along the underside of the roof or ceiling structure, while the sill height would vary depending on location; in living, dining and family room spaces the window wall extended from floor to ceiling and encompassed sliding glass doors, while in kitchens the sill height was set three feet or more above the floor to accommodate base cabinetry. Depending on the model, some of these window walls were visible from the street. The original 3-bedroom model had the largest floor-to-ceiling window walls of any Tucson production home of the era. In the earliest models, fixed windows were framed in wood, while clear-anodized aluminum was used for operable sliding glass doors and horizontal sliding windows. Starting in 1964, all windows were framed in aluminum.

Board and Batten Sheathing--The designs used a redwood board-and-batten sheathing as a secondary exterior wall surface, which was implemented as an infill panel that would provide enclosure between masonry walls and windows. The redwood surfaces have been painted.

Carport--In the decades after World War II, the automobile was an integral part of suburban America and was a symbol of modern living, representing freedom of movement and opportunity. Starting in the 1940s, most production houses had open carports where the vehicle was clearly visible from the street. At Windsor Park, most carports were designed as independent structures that could be flexibly located on the property to accommodate the irregular shape of the lots. This had the added advantage of creating more variety within the neighborhood. In most later models the carport was integrated into the front facade. In most cases, the carport is fully or partially enclosed on three sides.

Entry Courtyard--Many of the later Windsor Park houses have an entry courtyard enclosed by a masonry wall that was integrated into the building's front facade. This created depth to the facade, allowing plants to be visible from within the wall. It also created more privacy from the street and a more elaborate entry sequence.

Systematic Construction--Oxman's profitability was derived from the ability to minimize construction costs through innovation and efficiency, while still providing a quality product that aesthetically appealed to mid-priced home buyers. Ambrose and Swanson's design focused on systematic construction and the development of a "kit of parts"--a limited palette of building components and simple material interfaces--that could be deployed in various forms and configurations and significantly simplified the construction process. The houses were conceived as assemblages of discrete and independent elements--masonry walls of burnt adobe or slump block, wood-framed walls sheathed in board and batten, wood-framed window walls, and wood-framed roofs. This reflected the emphasis on utility and efficiency that was one of the hallmarks of the Modern Movement. While conventional Ranch construction relied on simplified building forms to reduce costs, these Modern designs simplified individual building elements and configured them in a more complex composition to achieve a variety of goals.

The structural system was a combination of masonry bearing walls and post-and-beam construction. The post-and-beam system accommodated the multiple window walls in each house, while the masonry was used in both structural and non-structural conditions and was a more resilient material in the desert climate. The use of masonry also reflected the agreement among members of the Tucson Homebuilders Association, which had agreed in the mid-1950s that its members would build masonry houses.

The architects employed techniques and details that simplified the building process and reinforced and refined the Modern character. In the first three-bedroom design, for example, they eliminated all masonry corners, and extended windows from floor to ceiling, thereby eliminating the need for costly steel lintels or masonry window sill details. Masonry walls were simple, uninterrupted planes. Windows were combined into larger units so that masons could focus on building large wall sections rather than small, time-consuming details. This was clearly a cost-saving effort that streamlined the construction process for the masons, and made the extensive use of glass more affordable and cost-effective. The use of clerestory windows was another technique that simplified construction and was rare in tract home developments in Tucson at the time. Rather than having masons build around window openings, the laundry-room window was located on top of the wall. At a larger scale, the detached and independent

carport contributed to the kit-of-parts concept by providing additional flexibility in locating the houses on the lots.

The 1962 Windsor Park 3-bedroom model was awarded the title of “Best Home for the Money” and published nationally by *American Home* magazine in 1963. The house was also featured in *Practical Builder* magazine in 1964, a trade publication that featured the design and Oxman’s construction methodology.

Burnt Adobe and Slump Block Masonry

Adobe construction is one of the oldest construction techniques in the southwest and was used by Native Americans and European settlers. It was the dominant construction material in Tucson until the advent of rail access in the late 19th century provided significant alternatives. Even in the 20th century, adobe was one of the primary building materials in the southwest.

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 aesthetic 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 practice of firing adobe to improve quality dates to some of the oldest structures in southern Arizona, including the 18th century Mission at San Xavier del Bac.

In the early 20th century burnt adobe was generally perceived simply as an upgrade to standard adobe construction because it was less prone to water damage and could be used with conventional mortars. As a result, like traditional adobe, it was usually covered with stucco. The work of Josias Joesler was an exception; in the 1930s he utilized exposed burnt adobe for many high end custom homes in the Catalina Foothills Estates just north of Tucson. Joesler usually used a light mortar wash over the adobe to give these houses a rustic character.

It wasn’t until after World War II that burnt adobe became popular as an exposed finish material. In the early 1950s, burnt adobe became the predominant wall construction material for mid-priced production housing and custom homes in Tucson. Local homebuilders used it as a less expensive alternative to brick. It cost less because it was produced in Mexico, and because the larger size required less on-site labor. The color was similar to brick, resulting in a material that was familiar but also had a distinctive southwestern character; it was the perfect construction material to market to the influx of homebuyers coming from the east. The material also provided better resistance to the desert heat than brick or concrete block. Burnt adobe became the standard wall construction material for mid-priced tract and custom housing in the mid-1950s, and continued to dominate those markets until the late 1960s.

Exposed burnt adobe was unique to Tucson largely because of the city’s proximity to two major production centers in northern Mexico (Sasabe and Querobabi) and because transportation costs likely limited the material’s economic viability beyond a certain range. In addition, local production of adobe was far more expensive than in Mexico, as a result of the disparity in labor and fuel costs (wood was used to fire the Mexican kilns, and vast landscapes were deforested to keep the kilns fueled).

The bulk of burnt adobe construction in the 1950s and 60s used adobe from Querobabi, Mexico; this material tended to be more stable and cohesive, and the adobes could be cut using a tile saw. Variation in the color and quality of the adobes was a reflection of the clay that was mined to produce the blocks and the fuel that was used to fire the kilns. A few local companies produced their own burnt adobe, but it often lacked the quality and consistency of the Querobabi adobes. As a result many builders, including Oxman, advertised the use of “imported” or “Querobabi” adobe.

In the late 1950s Tucson’s concrete masonry industry introduced slump block masonry to compete with burnt adobe. Slump block had first been used in Florida and California starting in the late 1940s and early 1950s. 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 1958 the San Xavier Materials Company introduced slump block as “mission stone”, and allowed homebuilders like the Lusk Corporation to market the material as “Lusk Stone” in their “Skylark” model at the 1958 Parade of Homes. In Windsor Park, Oxman sold slump block as “Windsor Stone.”

By the late 1960s, slump block had become the primary wall construction material for production housing in Tucson. Like the painted concrete masonry of the 1950s, it was first associated with lower-priced housing; but over time it became a more accepted material throughout the production housing industry. The shift away from burnt adobe also accommodated a shift in building forms toward parapeted wall construction and territorial style houses in the late 1960s and 1970s. Although burnt adobe had better moisture resistance than standard mud adobe, it was still susceptible to moisture infiltration; so most burnt adobe construction relied on projecting roof eaves to protect the 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, while burnt adobe was used primarily for custom houses.

In the late 1970s and 1980s, as Tucson homebuilders shifted to wood frame construction to reduce costs, the masonry industry shrunk dramatically. The Querobabi plant eventually stopped exporting burnt adobe to Tucson in the 1980s, though some is still imported from Sasabe. Both burnt adobe and slump block are now used primarily for additions and repairs to existing houses. More recent adobe construction has reverted to the more traditional sun-dried adobe, with the inclusion of stabilizers (cement or asphaltic) that protect the adobe from long term water damage. Because of the relatively high cost of adobe construction, this material is now almost exclusively used for high-end custom homes.

In a sense, exposed burnt adobe and slump block were modern materials. Both were developed to address certain deficiencies in existing wall construction systems, and both were innovations that became synonymous with mid-century housing in Tucson.

Ambrose, Swanson and Associates

Born in Pennsylvania, Robert J. Ambrose (1918-1988) received a degree in Architecture from Penn State University in 1940. Between stints as a pilot for the Army Air Corps in World War II and the Korean War, Ambrose worked for the architecture firm of Button & McLean in Pennsylvania. After moving to Tucson in 1949, he worked for architects F. O. Knipe and Frederick Eastman. He started his own practice in 1955, and was one of the first faculty members of the University of Arizona's School of Architecture in the late 1950s.

David S. Swanson (1922-1980) was born in Tacoma, Washington and attended the University of Oregon. After his enlistment in the Navy during World War II, he returned to the University of Oregon where he received a degree in architecture in 1950. He moved to Tucson and worked for two pre-eminent Modern designers, Nicholas Sakellar at Scholer Sakellar and Fuller, and William Wilde at William Wilde and Associates. He also worked for Blanton and Cole. Like Ambrose, he was also one of the first faculty members of the University of Arizona's School of Architecture in the late 1950s.

Ambrose and Swanson partnered to form Ambrose, Swanson and Associates in 1958. They were partners for just 5 years, but during that time they generated a substantial body of work, including a number of designs that were mass-produced for the housing industry. They designed model homes for tract builders at a variety of price points, as well as apartment and condominium complexes. Some of their projects included:

Project	Date	Developer
Valentine Homes/Ferry Addition	1958	Estate Development Corp.
Valentine Terrace	1959	Estate Development Corp.
M-Z Bar Ranch remodel	1959	
Sambee Gardens	1959	Beauty-Built Homes (Jack Young)
Fiesta Park subdivision	1959	Beauty-Built Homes (Jack Young)
Oro Valley Estates Apartments	1959	Broadway Construction Co. (Joseph Timan)
Ginsburg Residence	1959	
Orange Grove Valley 1	1960	Maslow Construction Corp.
Wishing Well Meadows	1960	Maslow Construction Corp.
Rose Hill Estates No. 2 Resub.	1960	Jack Young Dev.
Park View Apartments	1960	
custom model home for Shadron Co.	1960	Shadron Co.
Oro Valley Apartments	1960	Joseph Timan
Bethel Christian Reformed Church	1961	
Wallis Cleaners	1961	
Doolen Junior High School Addition	1961	
Ambassador House Apartments	1961	
Windsor Park	1962	Meadowlane Estates (Herbert Oxman)

Carriage Hill	1962	PAT Homes
Ritter Residence	1962	
Uptown Medical Plaza	1963	

In 1958, the developers of Valentine Homes sold 70 houses in four weeks, an accomplishment that received public notice in the local newspaper. This may have played a role in Ambrose Swanson's expansion into the production home building industry. Some of Ambrose Swanson's work for Tucson builders was unremarkable, but there was an emphasis on large window walls, cost-effective construction systems, and indoor-outdoor living and for certain builders, including Maslow Construction at Orange Grove Valley and Jack Young at Sambee Gardens and Rose Hill, the designs were distinctive.

Ambrose Swanson also designed several custom houses for the management of some of the developers they were working for, including Martin Ginsburg of Estate Development Corporation and Melvin Ritter of P.A.T. Homes. The firm won several design awards, including "Best Home for the Money" from *American Home* magazine in 1961 for one of their Orange Grove Valley models and again in 1963 for Windsor Park. They also won an Award of Merit from the American Institute of Architects and *Sunset* magazine in 1962 for the Ritter Residence.

Ambrose and Swanson ended their partnership in 1963. The reason for the split is not clear, but may have been related to the slump in the production housing market that began in 1963. Many builders were significantly impacted by the shift in the economy and some went bankrupt, including the Lusk Corporation, the area's largest builder. It may have also been related to Ambrose's statements about the state of the building industry in Tucson while he was President of the local chapter of the American Institute of Architects. Anecdotal evidence suggests that Ambrose's 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 (THBA) and resulted in the firm 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. In 1964, Ambrose was part of a commission that recommended the State Legislature adopt legislation that would allow for a county building code. Swanson had also spoken to the THBA about improving the quality and ethics of the industry, but may have differed on the possible solutions.

After 1964, Ambrose had little work from developers and builders. He designed the law offices of Rucker, Lesher, Scruggs, a renovation and expansion of the Central Church of the Nazarene, an addition to Catalina High School, the Formica World's Fair Show House adaptation for Tucson, and the identical Chula Vista and Shadow Pines apartment complexes. By 1972, he was working for architect William Wilde. He eventually went to work in Pima County's Building Codes Department as a plans reviewer.

Swanson also was unable to maintain a private practice for long after the split, though he continued to design for several builders in the mid-1960s, including Oxman, Estate Development Corporation and P.A.T. Homes. Swanson continued to work with Oxman on the designs for Windsor Park II and Windsor Park III as well as several custom houses, including

the notable Willmarth Residence and Oxman's own home. In 1967 Swanson left Tucson and took a position in Washington D. C. designing housing for the Federal Government.

Herbert Oxman (1914 - 1979)
Herbert L. Oxman was born and raised in New York City. Evidence suggests that he attended the University of Georgia and graduated in 1935, but this is unconfirmed. He was enlisted in the US Army during World War II. After the war, Oxman went to work for the Mandelbaum Coat Company, a New York based distributor of women's clothing owned by his wife's family. At the suggestion of Malcolm A. Brill, a friend and successful contractor and developer, Oxman created the Meadowlane Estates Corporation and built a small development of single family houses near Woodmere in Nassau County on Long Island.

In 1961 Oxman moved to Tucson. He had been encouraged to move (apparently after a tragic death in the family) by Melvin Ritter, his brother-in-law and the president of P.A.T. Homes, one of the largest homebuilders in the city. Ritter and the Mandelbaum family were well established in the local homebuilding industry by 1961 and were instrumental in assisting Oxman as he established his business in Tucson. His first project was the Windsor Park development, which was a significant jump in scale from his project in New York. By late 1961, Oxman had purchased and platted the property and by early 1962 he was offering homes for sale. Oxman hired David Wiener of the Wiener Co., a public relations firm, who showed a deftness for marketing. Wiener created a public persona for Oxman--*J. Herbert Oxman*--and developed a marketing concept around a gentleman builder and his innovative approach to design and development. Even in the midst of an economic downturn and housing slump Oxman managed to succeed at Windsor Park.

Oxman expanded Windsor Park in 1965 and again in 1968. After completing Windsor Park in 1969, he continued to develop and build houses. When architect David Swanson left Tucson, Oxman hired architect Earl Kai Chann to design houses at the Tanque Verde Terrace and Cresta Verde subdivisions. These models were similar to those at Windsor Park, but changes in development costs and in the marketplace limited Oxman's ability to offer a distinctive product. Oxman's subdivisions included:

Development	**Year**
Windsor Park	1961
Windsor Park II	1965 (platted in 1964)
Windsor Park III	1968 (platted in 1967)
Tanque Verde Terrace	1971 (platted in 1970)
Tanque Verde Terrace II	1972
Cresta Verde	1973
Cheyenne Estates	1975

Oxman also built homes in El Dorado Hills in the late 1960s and Dorado Country Club in the 1970s. He also expanded into custom homebuilding and partnered with both Swanson and Chann on several houses.

Conclusion

The Windsor Park subdivision represents perhaps the highest aspirations of mid-20th century Modern tract subdivision living in Tucson, in the tradition of California builder Joseph Eichler, and the houses are an exceptional regional example of Modern middle-class production housing.

In 2010, the Windsor Park houses were identified by the *Modern Architecture Preservation Project* (MAPP) of Tucson as one of 50 exceptional examples of mid-century Modern residential design in Tucson. In the City of Tucson Historic Preservation Office's 2016 eligibility assessment report "Post-World War II Residential Subdivision Development in Tucson, Arizona 1945-1975" which evaluated nearly 400 subdivisions, Windsor Park was identified as a top tier candidate for listing on the National Register of Historic Places and a "highest priority" subdivision for the city's preservation efforts.

The Windsor Park subdivision is eligible under Criterion C at the local level of significance as an exceptional example of mid-20th century Modern production housing.

Photographs

Photo #1: Windsor Park model

Photo #2: Windsor Park model

Photo #3: Windsor Park model

Photo #4: Windsor Park model

Photo #5: Windsor Park model

Photo #6: Windsor Park model

Aerial Map

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