



ORIGINAL 4434

Blaine, Minnesota
Boise, Idaho
Broward Co.,
(Coral Springs), Fla.
Oklahoma City, Oklahoma

The Affordable Housing Demonstration

Case Studies



The Joint
Venture for
Affordable
Housing



THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, D.C. 20410

January 1986

Four years have gone by since I announced the formation of the Joint Venture for Affordable Housing as a public-private partnership to make homeownership available to more people by combating the problem of high housing costs due to outdated and unnecessary building and land use regulations. Much has been accomplished toward this goal.

We in the Federal government can point with pride to several achievements. Mortgage interest rates, which were approaching 20 percent when this Administration took office, have been brought down by the President's economic recovery program by almost half; they are generally ranging from 10 1/2 to 11 1/2 percent in most parts of the country. At the same time, the Department of Housing and Urban Development's Federal Housing Administration has made it much easier for builders to obtain project approvals both by streamlining mortgage insurance processing and by simplifying HUD's own regulatory requirements; rather than impose a second set of rules in the Minimum Property Standards, HUD's Field Offices now accept projects meeting local building codes in most instances.

Equally significant progress has been made by many local communities. Local government officials and builders have cooperated to create new "affordable housing demonstrations" all across the country. With savings as much as \$10,000 per home in some projects, many more families have been able to buy their own homes. As these projects are completed, put on the market, and often sold out, their history and the savings which have been achieved are described in case study reports.

This report presents case studies of four recently completed projects in Minnesota, Idaho, Florida, and Oklahoma. I urge you to read these case studies and the other new reports on recent projects, as well as the 12 which preceded them, and to use the ideas described therein as they apply to your situation in your community. These ideas will help bring the cost of new housing in your community down to levels where more people can afford housing, and that is what we all want to happen.

Very sincerely yours,

A handwritten signature in dark ink, appearing to read "Samuel R. Pierce, Jr.", is written over the typed name. The signature is fluid and cursive, with a large initial "S" and "P".

Samuel R. Pierce, Jr.

The Affordable Housing Demonstration Four Case Studies

Blaine, Minnesota
Boise, Idaho
Broward County (Coral Springs), Florida
Oklahoma City, Oklahoma

Prepared for:
U.S. Department of
Housing and Urban Development,
Division of Building Technology

By:
NAHB Research Foundation, Inc.
P.O. Box 1627
Rockville, Md. 20850

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The Joint Venture for Affordable Housing

Housing costs have risen dramatically in recent years, so that many people have been unable to buy a home. Part of this cost increase was due to the high rate of interest on home mortgages, which reached almost 20 percent in some areas of the country before dropping under 13 percent in 1985.

A large part of the increase, however, was due to other factors -- inflation in the cost of materials and labor, a reduction in the amount of land available for housing, which has drastically increased lot prices, and changes in market patterns leading to larger homes on larger lots. Recent studies by the President's Commissioners on Housing and by a special U.S. Department of Housing and Urban Development (HUD) Task Force on Housing Costs confirm the findings of earlier studies which show that ways exist to cut the cost of housing, if they are used. Too often, these studies show, out-of-date regulations and building practices prevent these ideas from being applied. In fact, the studies pointed out that many builders and local officials do not even know about many of the ways that exist to reduce housing costs.

The Joint Venture for Affordable Housing was initiated by HUD Secretary Samuel R. Pierce, Jr., to correct this situation. Since affordable housing is a problem which involves all levels of government as well as the rest of the housing industry, finding an answer requires the participation of all of these elements. The Joint Venture, therefore, is a real partnership of the following organizations, all of whom have an interest in making housing more affordable:

American Planning Association
Council of State Community
Affairs Agencies
International City
Management Association
National Association of
Counties
National Conference of
State Legislatures
National Governors'
Association
Urban Land Institute
National Association of
Home Builders and the
NAHB Research Foundation
U. S. Department of Housing
and Urban Development

Through conferences, workshops, demonstrations, publications, and similar activities, each of these organizations is helping to identify ways to cut construction costs through more effective and efficient planning, site development, and building procedures, and to provide this information to its members.

The Affordable Housing Demonstrations

Home builders learn from other builders; successful ideas are copied and used in new ways by other builders in many different areas of the country. The affordable housing demonstrations have been developed to illustrate ideas for reducing housing costs in real projects and to provide information on the cost savings that resulted.

The central theme of the demonstration program is that a builder and those local officials responsible for regulatory approval can, together, identify ways to reduce the cost of housing and to modify or interpret local building codes and site development regulations so that these

methods can be used. In the demonstration program, no Federal funds are provided either to the builder or to the community to support the demonstration projects.

HUD and the NAHB Research Foundation do provide technical assistance through various publications documenting previous research studies and through suggestions to the project designers, but it is the builder's responsibility to develop a list of possible cost-cutting ideas and it is the responsibility of local officials to accept those which are reasonable for that community.

Participating builders and communities were selected for the demonstration program in several ways. Before the Joint Venture was announced in January 1982, HUD approached a number of communities which had already demonstrated, in other activities, a willingness to modify regulations and to take other steps to encourage local development. As these communities agreed to participate in the program, the National Association of Home Builders worked through its local associations to identify builders in the communities with reputations for quality and records of innovation. Following announcement of the first twelve communities and builders selected to participate in the demonstration program, many other communities and builders expressed interest in joining the program. In each case, HUD required a formal commitment by the highest elected official that the local government would support the program.

Once a project was accepted, HUD and the NAHB Research Foundation assisted the builder to identify cost-cutting ideas and to develop a workable, attractive site plan. The cost-cutting measures used in the various

demonstrations vary widely. In some projects, unit densities were increased to reduce the impact of land cost on the final price, while good site planning and design made this increased density acceptable to the community. In other projects, street widths, street design standards, and utility system requirements were changed to reduce costs. Housing materials and construction methods were changed in many projects. In addition, many projects benefited from improvements in local administrative procedures which reduced the time and effort needed to obtain building and land use approvals.

The Case Study Approach

Each project undertaken as an Affordable Housing Demonstration as part of the Joint Venture for Affordable Housing is being described in a case study report. The case studies are intended to be learning tools to help home builders, local officials, and others concerned about affordable housing recognize and seize opportunities to reduce housing costs through regulatory reform and the use of innovative planning and construction techniques.

Information on the changes and their impact on costs has been collected by the NAHB Research Foundation. Each case study describes the community, outlines the builder's experience, and discusses the specific project characteristics and history. Where possible, the cost savings resulting from the use of the various procedural, planning, development, and construction changes are calculated and reported in the case studies.

The following material provides this information on the Affordable Housing Demonstration project in Blaine, MN; Boise, ID; Coral Springs, FL; and Oklahoma City, OK.

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The Affordable Housing Demonstration Case Study 1

Blaine, Minnesota

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Summary

The Affordable Housing Demonstration project in Blaine, Minnesota, is Cloverleaf Farm-9th Addition. Good Value Homes, the largest builder in Blaine, is both builder and developer of the project.

Blaine, located in Anoka County, is part of the Minneapolis St. Paul Metropolitan Statistical Area (MSA). It is ideally located just 15 miles north of both Minneapolis and St. Paul. According to the 1980 U.S. Census, the populations of the Twin Cities MSA and Blaine were 2,109,207 and 30,390, respectively. The average sale price of a house in Blaine during 1983 was \$68,434.

Good Value Homes built 13 eight-plex manor homes for the demonstration.

The eight-plex has five unique floor plans that range in size from 832 to 1,232 square feet and are priced in the mid \$40's. Each unit has two bedrooms and is available in one- or two-story layouts. Every unit has a direct entrance from the street and a garage with direct access to the house.

Costs saved through changes in processing procedures, land development standards, construction codes, and use of building practices not normally found in Blaine are estimated to be \$4,963 per unit. The savings include \$283 per unit in reduction of processing time, \$2,680 per unit in land development, and \$2,000 per unit in building design and construction.

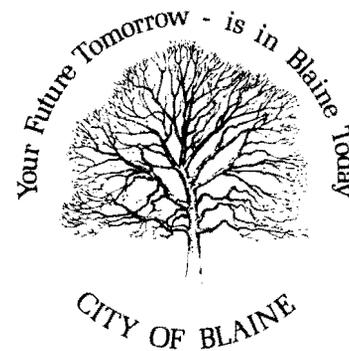
Project Description

The Community - Blaine, Minnesota

The City of Blaine began as a tiny agricultural settlement in the 1870's. Rapid housing growth after 1940 transformed Blaine into a growing, prosperous community, which was incorporated as a city in 1964. The only major agricultural enterprise left in the city is high-quality sod production. Over 2,000 acres of sod are currently under cultivation, and it is shipped to national markets. Other industries in the city are freight and retail businesses.

Blaine, located in Anoka County, is part of the Minneapolis/St. Paul Metropolitan Statistical Area (MSA). The Twin Cities area has grown considerably over the last decade. According to the 1980 Census, the Minneapolis/St. Paul MSA had a population of 2,109,207 compared with 1,874,612 ten years ago. The City of Blaine has also experienced population growth. Its population was 20,573 in 1970 and has grown to 30,390, according to the 1980 U.S. Census. The increase is attributed to the city's ideal location in the Minneapolis/St. Paul MSA. It is just a 15-minute car ride north of both Minneapolis and St. Paul, has excellent access to major highways, and an abundance of good, developable land.

As shown in Table 1.1, median family income for Blaine is about equal to that for the Twin Cities area. The value of Blaine's housing stock is, however, slightly below that of the MSA. According to the multiple listing service (fourth quarter - 1983), the average sale price for homes in Blaine was \$68,434, compared with \$77,685 for the MSA. It is also interesting that the average selling price in Blaine dropped by 5.9 percent when compared to 1982 listings, while prices have increased by 2.6 percent for the MSA.



Blaine logo

Blaine City Hall



Table 1.1

	<u>Blaine</u>	<u>Minneapolis/St. Paul MSA</u>
Median income per capita	\$24,725	\$24,518
Average home price	\$68,434	\$77,685
Percent of housing stock in rental units	9.3%	33%
Average persons per household	3.37	2.71

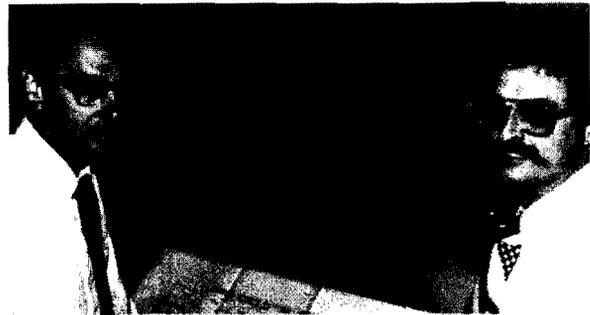
The propensity to buy homes rather than rent is strong. As illustrated in Table 1.1, only 9.3 percent of Blaine's housing stock is in rental units, compared with 33 percent for the MSA. The percent of housing stock in rental units is also well below the national average of 32.1 percent.

Commensurate with the high rate of home ownership is the large number of young families residing in the city. The median age in Blaine is 24.6 years. This population, combined with an average of 3.37 persons per household, suggests many young families. The average persons per household is 2.71 and 2.75 for the Twin Cities and United States, respectively.

Blaine is part of the Metropolitan Council for the Twin Cities area, which has authority over water and sewer, airports, transportation, utilities, and parks and open space. Further, the Metropolitan Council prepares the master plan that

delineates land use for cities under its jurisdiction. Since the demonstration site was zoned for higher densities in the master plan than planned for the demonstration, it was easy to rezone the site.

The mayor and city officials have helped to promote the Affordable Housing Program. Francis Fogerty, the mayor since 1972, was re-elected for another two-year term in November 1984.



Ron Henrickson and Jerry Mortenson

The Builder - Good Value Homes

Good Value Homes (GVH) is both the builder and developer of the Affordable Housing Demonstration project--Cloverleaf Farm 9th Addition. Donald Hardle, President of GVH, and his wife, Betty, began building homes in 1967 as an avocation while both taught school.

In 1969 Mr. and Mrs. Hardle created and incorporated the private corporation of GVH. The company has expanded its operations over the years and is the largest builder in Blaine. GVH built 27 houses in 1969 and has increased production to over 450 homes in 1984.

Hardle has been involved with the development of many housing subdivisions throughout the Minneapolis/St. Paul metropolitan area. He has therefore gained the experience, resources, market knowledge, and staff to create and exploit the opportunities of the market. The immediate past, described as "tough times" by most in the home building industry, has been a profitable period for Good Value Homes. Hardle was also the President of the Minneapolis Builders Association in 1984.

In addition to generally overseeing the corporation, Hardle participates actively in acquiring land, reviewing purchase agreements, and supervising the completion and inspection of homes under construction.

James Adams, Vice President and Construction Superintendent, is responsible for the construction activity in the field. He oversees the hiring of all subcontractors and assists in the pricing of the component parts of the house.

Betty Hardle, Designer and Planner, assists with the floor plans and interior decorating of models. She also participates in pricing component parts of the house.

John Peterson, Director of Land Development, has been the primary contact for the demonstration project. Mr. Peterson works with Mr. Hardle on land acquisition, planning, and development. He deals with municipalities and governmental agencies and assists in the general supervision of the planning and operations of Good Value Homes. He has spent a lot of time working with city and HUD officials on this project and consequently has a good working relationship with both.



Donald Hardle
President, Good
Value Homes



John Peterson
Director, Land
Development

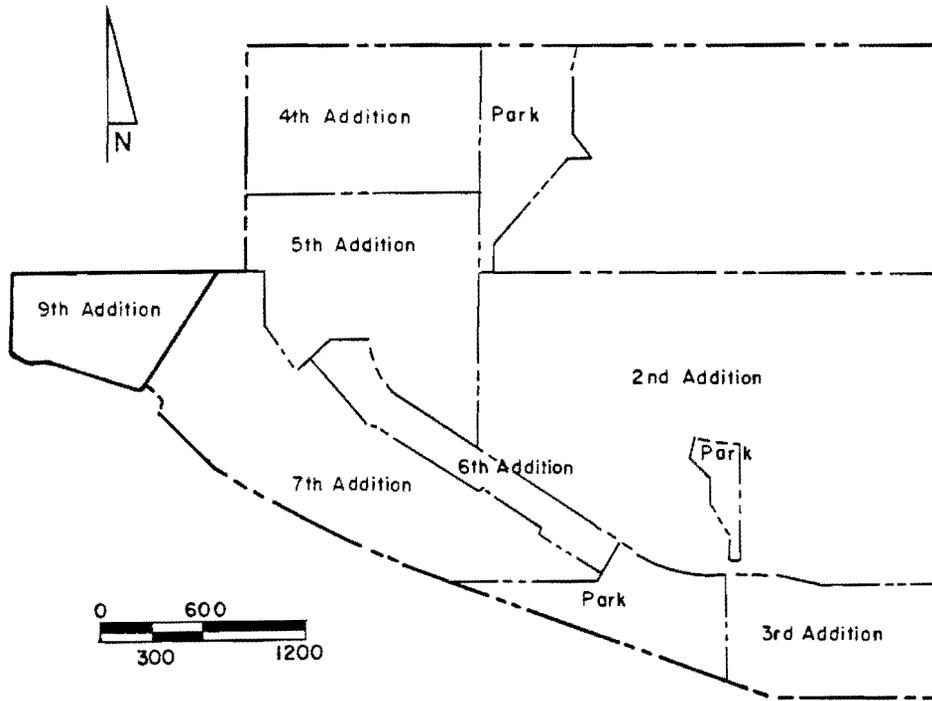
The Project - Cloverleaf Farm - 9th Addition

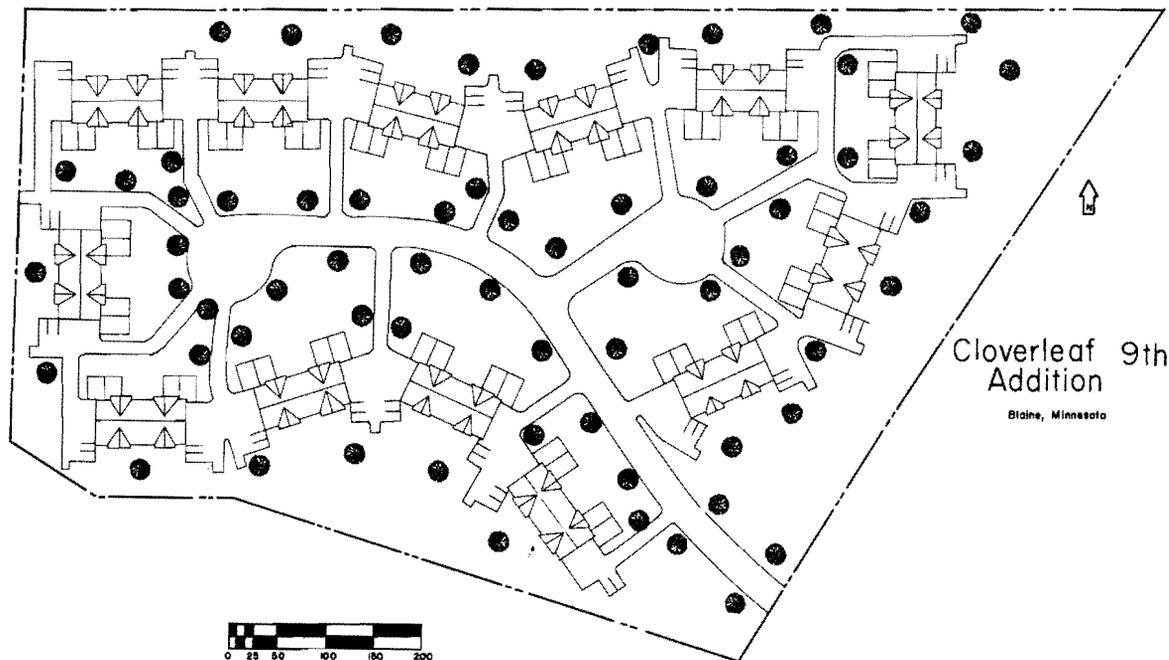
The demonstration project is on 12.94 acres in the Cloverleaf Farm subdivision and includes 13 eight-plexes for a total of 104 units. Good Value Homes has been working on this development since 1978 when they began building single-family homes. As the development progressed, GVH began building quadraplex and six-plex homes. Cloverleaf Farm - 9th Addition is the first in which eight-plex manor homes have been built. Consequently, densities for this section were increased to accommodate these homes.



Cloverleaf Farm logo

Clover Leaf Farm Blaine, Minnesota





Good Value Homes requested that the site be rezoned from R-1, single family, to R-3, multi-family. An R-1 designation allows for a density of 2.5 units per acre while an R-3 designation increases the density to a maximum of 20 units per acre. Since Blaine does not have a single-family attached zoning category, the project required a multi-family designation.

Fortunately, it was easy to obtain an R-3 designation, because the Metropolitan Council had already increased the allowable density for the site in the Regional Master Plan, followed by the city.

The Homes

Good Value Homes built 13 manor homes for the demonstration project. There are five unique floor plans to suit many different life-styles.

The units range in size from 832 to 1,232 square feet and are priced from the mid \$40's. (See Table 1.2 for price list and square footage.) Each unit has two bedrooms and is available in one- or two-story layouts. The two-story Colonial is ideally suited for a young family, while the Rambler features a one-story layout more appropriate for empty-nesters. Every unit has a



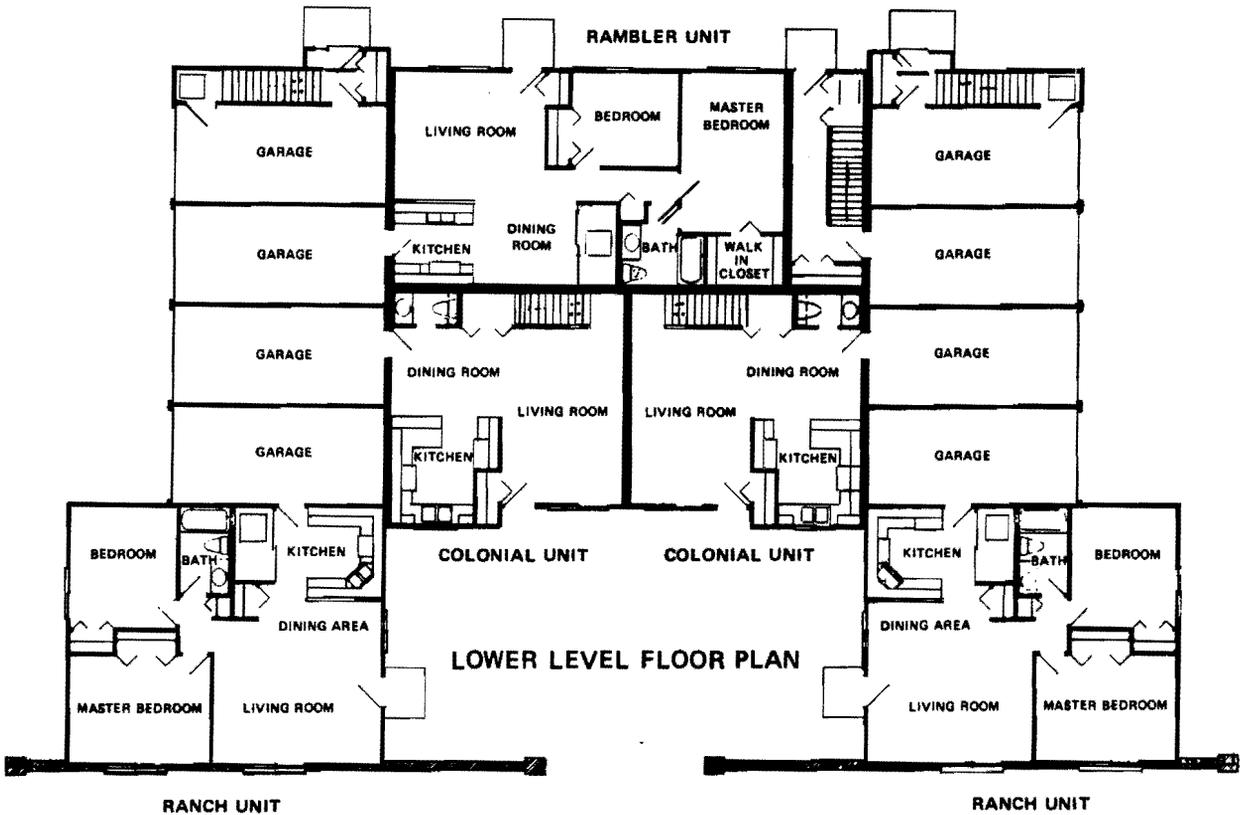
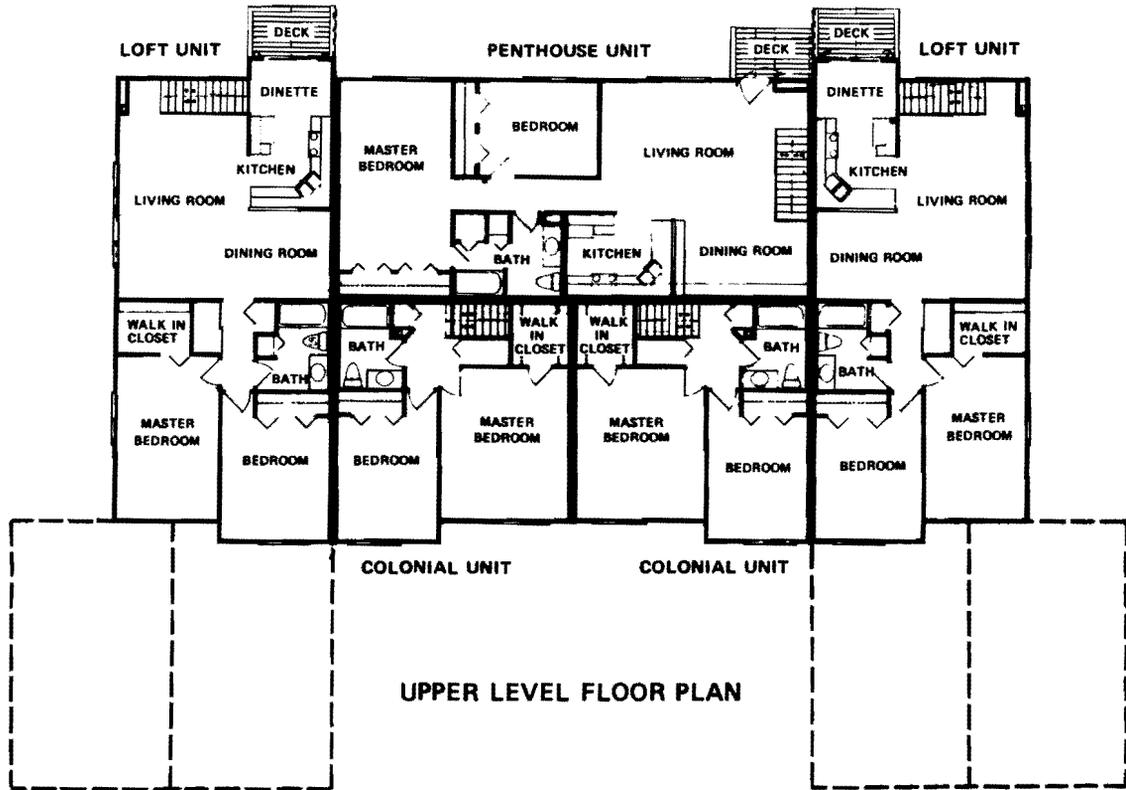
Eight-plex manor home

direct entrance from the street and a garage with direct access to the house. Garages are considered a required feature because of the severe winters in the Minneapolis/St.

Paul area. The eight-plex manor homes are efficiently designed to exclude common interior hallways, which are expensive to build and costly to maintain.

Table 1.2

<u>Model</u>	<u>Square Footage</u>	<u>Price</u>
Ranch Rambler	832 sq. ft.	\$44,900
Rambler	880 sq. ft.	\$45,500
Colonial	1,100 sq. ft.	\$48,900
Loft	1,110 sq. ft.	\$47,900
Penthouse	1,232 sq. ft.	\$48,900



Standard Features

- Oak cabinets
- Built-in dishwasher, disposal, and hood
- Garage with direct entrance to home
- Natural gas furnace with electronic ignition
- Fiberglass tub/shower unit
- 40-gallon gas water heater
- Landscaped and sodded common ground with sprinkler system
- Underground gas and electric service
- Double wall sound-barrier construction between units
- Choice of carpet and vinyl tile
- Rough-in for air conditioner



Interior of model



Interior of model



Eight-plex manor home model

Option List

- Garage door opener
- Appliance package
 - Refrigerator
 - Washer/dryer
 - Electric range
- Commercial water softener
- Air conditioner

Because these units are being sold as condominiums, all exterior maintenance, such as lawn care and snow removal, will be provided by the Homeowner's Association. The monthly fee for these services is \$45.

GVH situated the homes to allow for the maximum amount of open space between buildings and installed a lawn sprinkler system in the common areas to ensure proper maintenance. Soil conditions in Blaine are sandy, so lawns require daily watering.



Project History

Background

Cloverleaf Farm-9th Addition was designated as a demonstration site on November 15, 1982. On November 22, 1983, GVH submitted the floor plans and elevations of the demonstration units to the city. City Council passed a resolution granting preliminary plat approval on January 5, 1984. GVH wanted to build their model units as soon as possible to take advantage of the spring buying season. The normal procedure in Blaine is to allow construction after final plat approval, which could take up to 120 days. At that time, City Council usually rezones the site to conform with the Master Plan.

Since fast-tracking a project can save valuable development time, HUD suggested to Blaine city officials that they adopt a modified regulation process for the demonstration. HUD provided information on how projects

in Lincoln, Nebraska, and Phoenix, Arizona, were able to expedite the regulatory process by allowing construction to begin prior to final plat approval. Responding to this suggestion, Blaine adopted a modified procedure for the demonstration.



Side view of eight-plex manor home



Eight-plex manor home model

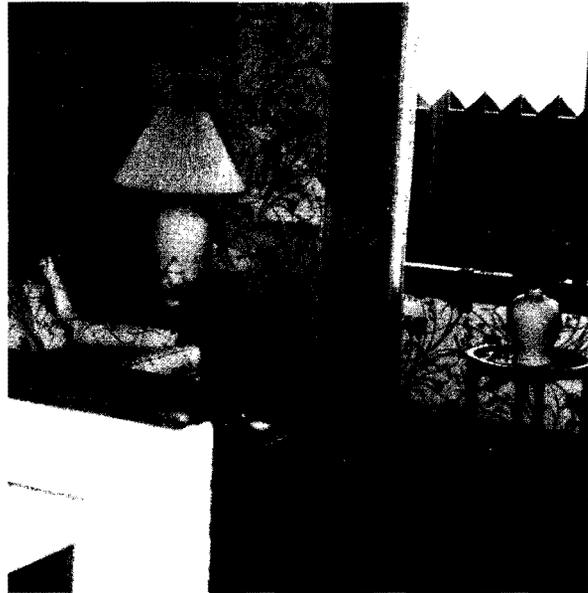
Specifically, Kenneth Briggs, former Community Development Director, recommended to City Council that GVH be allowed to begin construction on their models at the time of preliminary plat approval. This meant rezoning the site from R-1, single-family, to R-3, multi-family, at this time. City Council passed the motion allowing GVH to begin construction on their models on January 19, 1984. GVH received their building permit on January 21, 1984, and began construction soon thereafter. GVH obtained final plat approval on March 15, 1984, and a building permit for the rest of the project on April 2, 1984.

The modified regulatory procedure saved GVH 54 days since they were able to begin construction on January 21, 1984, instead of waiting until final plat approval on March 15, 1984. The actual cost savings attributed to the modified procedure are discussed in Chapter 3, Innovations and Their Impacts on Costs.

Donald Hardle entered the eight-plex manor homes in the Metropolitan Council of the Twin Cities Affordable Housing competition in spring, 1984, and won first place in the



Tudor style variation



Interior of model

condominiums (under \$60,000) category. Selection criteria for the homes included value for the money, general appeal, livability, and energy use.

Marketing

Good Value Homes targeted their units to young families that were first-time home buyers. An unexpected market was retired couples with no children (empty-nesters). The empty-nesters were attracted to the one-story layout offered in the Rambler models.

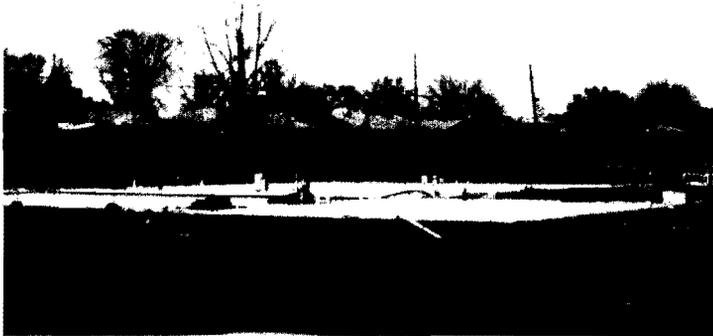
GVH built a sales center which displayed all five models decorated by Betty Hardle. Good Value Realty, a subsidiary of Good Value Homes, handled the sales. As of July, 1985, 68 of 104 units had been sold. John Peterson claims that all models have sold equally well because of their individual markets and affordable prices.

Innovations and Their Impact on Costs

One purpose of the Affordable Housing Demonstration Program is to collect and evaluate cost data on residential development practices and construction techniques. The following analysis identifies the impact of regulations, standards, and time delays at Cloverleaf Farm - 9th Addition, on costs for the home buyer.

Administrative and Processing Changes

Blaine subdivision processing procedures usually take 120 days. For the demonstration, the city expedited this process by allowing GVH to begin construction on their model homes prior to final plat approval. This reduced the processing time by 54 days which meant a total savings of \$29,393 or \$283 per unit in overhead, carrying charges, taxes, and labor and materials.



Slab-on grade foundation



Eight-plex under construction



96th Lane leading into site

Site Planning and Development Changes

Site planning and land development are major areas of potential cost reduction for most builder/developers. These costs often increase in direct proportion to the complexity of local regulations, zoning requirements, and levels of required standards. Because the City of Blaine was cooperative, GVH was able to cut the costs of developed land in Cloverleaf Farm - 9th Addition.

Although GVH used the standard subdivision regulations for the demonstration, the builders could have used the new Residential Flex District regulations recently adopted by Blaine. The Residential Flex District allows for a greater degree of flexibility in land development. The regulation intends to create a reasonable balance between the interests of the developer and the adjacent property owners. (See Appendix I.)

GVH did, however, request that densities be increased from 2.5 to 8.0 units per acre and was granted such designation by Blaine City Council. Even though the newly designated R-3 (multi-family) zoning of the site allowed a maximum of 20 units per acre, John Peterson felt that the 8 units per acre density was more appropriate for their market. The increase in density translates into a per unit savings of \$2,399.

GVH requested a waiver to the regulation that restricts the length of cul-de-sacs to 500 feet. The Fire Department requires this rule to ensure quick and easy access to a site. The cul-de-sac limitation would have also made the site unuseable unless a second access road was built. As illustrated in the street plan University Avenue abuts the west side of the development. A new intersection would also have posed a safety hazard for residents on 96th Lane by placing an additional intersection on University Avenue, one block down from 97th Avenue.

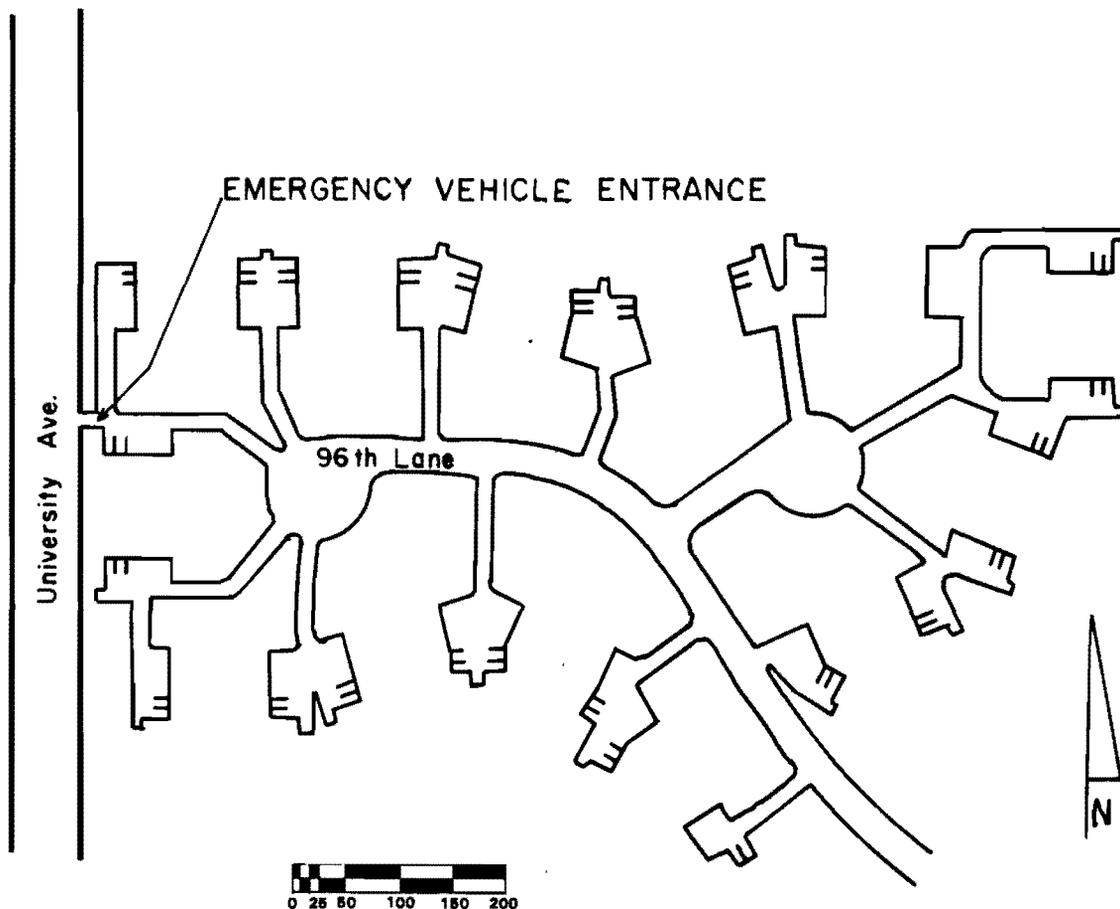
As a solution, the city passed a special ordinance allowing a secondary emergency vehicle access over the water main easement from University Avenue and increasing the allowable length of the cul-de-sac to 1,000 feet. This emergency access is a paved road with a locked chain link gate at University Avenue. The Fire Department now has quick and easy access to the site and no buildable area has been lost because the emergency entrance is over a water main easement.

2-inch crushed stone base and 5-inch gravel sub-base. By not extending 96th Lane 200 feet to University Avenue, GVH saved \$20,000 or \$192.31 per unit.

If the city had not allowed the emergency entrance, an additional 200 feet of road would have been necessary to continue 96th Lane to University Avenue. The 30-foot-wide 96th Lane has a 15-foot easement on either side. It is built with a



Emergency vehicle access road



GVH installed a central water supply line for each building. The city normally requires that this line be 2 inches in diameter, but for the demonstration they allowed the diameter to be reduced to 1-1/2 inches. GVH made the case that the 1-1/2-inch pipe could meet the water demand of an eight-plex unit.

GVH also requested permission to use only one shut-off valve per building, but the city did not approve this request. They did, however, allow GVH to cluster the shut-off valves in one central location. Both the clustering of the valves and reduced size of the water supply lines resulted in a total project savings of \$1,469 or \$14 per unit.

Along with the water supply lines, GVH requested the city to allow them to install one water meter per building instead of the normally required one per unit. A water meter that can accommodate an eight-plex cost \$230 or \$170 less than installing individual meters costing \$50 each. This request was approved; the one-meter-per-building allowance amounted to a cost savings of \$2,210 for the project or \$21 per unit.

Building Design and Construction

According to John Peterson, the efficient design of the manor house was an important contribution to the cost savings. Comparable eight-plex units in the area have common areas inside the building for halls and stairways. The unique design of this model allows every unit a direct entrance from the street (along with a separate direct entrance to the garage), eliminating the need for common interior space. A substantial cost savings is attributed to the design, because common interior hallways and stairs require up to 100 square feet of additional space per unit. Given hard construction costs of \$20 a square foot, the total project savings was \$208,000 or \$2,000 per unit.

Individual entrance



Individual entrances and garages



Details of Changes and Their Costs

The following table summarizes the cost savings attributed to administrative and processing changes, site planning and

development changes, and building design and construction. The total cost savings for Cloverleaf Farm-9th Addition was \$4,963 per unit.

COST REDUCTION SUMMARY		
DEMONSTRATION	COMPARISON	COST SAVINGS PER UNIT
Administrative and Processing:		
Two-month time saving because project fast tracked	Construction of model to begin after final plat approval	\$ 283
Site Planning and Land Development:		
Increased density R-3, up to 20 units per acre. Built 8 units per acre.	Original density R-1, 2.5 units per acre	2,453
Emergency vehicle entrance for fire department	Extending 96th Lane to University Avenue-200 feet in length, 30 feet wide	192
Reduction in size of central water supply line to 1-1/2 inches	Normally a 2-inch central water supply line required	14
One water meter per eight-plex	Individually metered units	21
Building Design and Construction:		
Efficient design, no interior halls or stairs	100 additional square feet per unit @ \$20.00 square foot to build	2,000
	TOTAL	\$4,963

Residential Flex District

29.80 Residential Flex [RF]

29.81 Intent

The Residential Flex District is intended to provide for greater flexibility in land use planning and maximize the choice of housing types and styles at a more affordable price range than is possible under the strict application of other sections of this ordinance. The Residential Flex District also attempts to create a reasonable balance between the interests of the property owner in freely developing his property, and at the same time protect the interest of surrounding properties in the following ways:

- (a) By encouraging a more creative approach in housing developments, that will result in quality living environments through innovative design and aesthetic controls;
- (b) By permitting a combination of housing types and styles, including single, two-family, and multiple family dwellings, with the exception of mobile homes;
- (c) By allowing flexibility in design by permitting cluster developments and a variety of architectural styles and treatments;
- (d) By allowing for any type of ownership, private, condominium, or rental;
- (e) By allowing flexibility in setback and height restrictions;
- (f) By allowing non-residential uses, such as commercial uses which will serve the inhabitants of such district, provided such non-residential uses will enhance the character, amenities, and convenience of those who live in the proposed development;
- (g) By providing an efficient use of land resulting in more cost efficient installation of utilities, streets, and other facilities.
- (h) By encouraging the preservation of common open space, recreational facilities, natural features, such as woodland and wetland areas;
- (i) By contributing to the tax base of the community without making undue demands on the community services; and
- (j) By providing the means for greater creativity and flexibility in environmental design than is provided under the strict application of the Blaine Zoning Ordinance and Subdivision Ordinance, while, at the same time, preserving the health, safety, order, convenience, prosperity, and general welfare of the City of Blaine and its inhabitants.

29.82 Criteria

The Residential Flex District is an overlay zoning district, and may be allowed in any residential or commercial district. Every proposal presented to the City Council for rezoning to the Residential Flex District shall be accompanied by a preliminary site plan as provided in Section 29.89 of this ordinance. A conditional use permit is required at the time of final plan approval to insure adherence to the preliminary site plan as approved at the time of rezoning of the site to Residential Flex District. The City Council shall consider the following criteria and objectives in processing the application for rezoning to Residential Flex District and the application for the conditional use permit:

- (a) That the proposal shall provide for a wider range of housing types, price ranges and styles than could be accomplished under the existing zoning;
- (b) That the proposal shall provide amenities and facilities and open spaces greater than the minimum requirements under existing zoning;
- (c) That the proposed development is compatible with the purposes and intents of this ordinance and with the comprehensive plan;
- (d) That the proposal shall exercise no substantial detrimental influence upon the market value of surrounding properties;
- (e) That the proposal shall show a favorable economic impact on the community at large;
- (f) That the proposal shall in no way be detrimental to the environment. Scenic aspects and natural features, such as streams, trees, topography, and geological features, shall be protected and preserved to the greatest extent possible;
- (g) That the proposal shall not impose any undue burden upon the public services and facilities, such as fire and police protection, schools, streets, water systems, sanitary sewer systems, and storm sewer systems;
- (h) That the proposed development is designed in such a manner to form a desirable and unified environment within its own boundaries, and also which will not be detrimental to future land uses in the surrounding areas; and
- (i) That the proposal be consistent with all other applicable City and State regulations.

29.83 Procedure

- (a) Prior to the preparation and filing of a preliminary site plan and formal application for the conditional use permit and the rezoning to the Residential Flex District, the developers or owners shall meet with the Director of Community Development to review all applicable ordinances, regulations and plans that will affect the area to be rezoned.
- (b) The developers or owners of the property shall prepare a preliminary site plan in accordance with the regulations of Section 29.89 and shall submit the plan to the Office of Community Development forty-five (45) days prior to the public hearing.
- (c) The preliminary site plan and the applications for a Residential Flex District and conditional use permit shall be submitted to the Administrative Review Committee for review and comment, and to insure compliance with other City codes and regulations.
- (d) Upon staff approval of the preliminary site plan and the application for rezoning and application for conditional use permit, a public hearing shall be scheduled before the Planning Commission.
- (e) The notice for public hearing shall be published in the official newspaper at least ten (10) days, but not more than thirty (30) days, prior to the public hearing, at which time the item will be heard. Notices will also be sent during this time period to property owners within three hundred fifty (350) feet of the subject property.
- (f) A written evaluation from the Office of Community Development shall be forwarded to the Planning Commission and the applicant one (1) week prior to the public hearing.
- (g) The Planning Commission shall simultaneously hold a public hearing on the preliminary site plan and proposed rezoning and conditional use permit requests. Following the public hearing, the Planning Commission shall submit in writing to the City Council its report, its findings, and its recommendation as to the appropriateness of the preliminary site plan, and shall recommend approval, modification, postponement, or disapproval, based upon the criteria set forth in Section 29.82 of this Ordinance.
- (h) The preliminary site plan and the rezoning application shall be scheduled for a City Council meeting within thirty (30) days after the submittal of the Planning Commission report.

-
- (i) The City Council shall consider the application for rezoning, pursuant to Section 29.82 and shall approve, postpone, or disapprove the application for the rezoning. If the application for the rezoning is approved, the City Council shall approve or modify and approve the preliminary site plan.
 - (j) The developer shall file final plans in accordance with the regulations of Section 29.891 in the office of Community Development at least thirty (30) days before a City Council meeting.
 - (k) The City Council, upon receipt of the final plans and the application for the conditional use permit, may approve the final plans and may grant a conditional use permit, if, in their determination, the proposed development is consistent with the preliminary site plan, as approved. A certified copy of the conditional use permit shall be recorded in the office of the Anoka County Recorder pursuant to Minnesota Statutes Section 462.3595, Subdivision 4.

29.84 Major Changes

If the applicant proposes major changes in the final site plan that are inconsistent with the preliminary site plan, these changes can only be made by resubmission of a new preliminary site plan and rezoning application to the Office of Community Development, and rescheduling of a new public hearing before the Planning Commission and reviewal again by the City Council.

The following constitute major changes:

- (a) Increase in density;
- (b) Change in architectural design or style;
- (c) Change in type of ownership, private, condominium, or rental;
- (d) Change of more than ten percent (10%) in total floor area;
- (e) Increase in height of any building;
- (f) Major modification to the landscape plan;
- (g) Reduction in the proposed open space;
- (h) Change in the development schedule;
- (i) Change in the road location or standards; and
- (j) Any changes determined to be major by the City Council.

29.85 Minor Changes

The City Council may, in its discretion, permit minor deviations from the preliminary site plan which do not change the concept or intent of the proposed development as previously approved.

29.86 Denial

The City Council shall deny any application for the conditional use permit if it finds the final plans do not substantially conform to the preliminary site plan as previously approved by the City Council. If the final plans are subsequently modified to conform to the approved preliminary plan, the applicant may resubmit said final plans to the City Council for approval.

29.87 Rezoning

- (a) If a conditional use permit is not granted within a two (2) year period from the time the City Council approves the rezoning and preliminary site plan, the Council may initiate a rezoning to remove the Residential Flex District zoning and rezone the property to the zoning that was in effect at the time of the initial rezoning.
- (b) If construction does not commence within two (2) years after issuance of the conditional use permit, the Council may initiate a rezoning to remove the Residential Flex District zoning and rezone the property to the zoning that was in effect at the time of the initial rezoning.
- (c) If construction is not proceeding in accordance with the approved development schedule, the Council may initiate a rezoning of all or part of the land to remove the Residential Flex District zoning and rezone all or part of the property to the zoning that was in effect at the time of the initial rezoning.

29.88 Development Guarantee

Prior to the granting of any building permit within a Residential Flex District, a deposit shall be made to the City, in cash or letter of credit, approved by the City, equal to one hundred fifteen percent (115%) of the estimated cost of all landscaping improvements as required by the final plans.

29.89 Preliminary Plans Required

- (a) PRELIMINARY SITE PLAN: The preliminary site plan shall be drawn at a scale of one inch equals fifty feet, one hundred feet, or two hundred feet. The submission may be composed of one or more sheets and drawings and shall include:
- (1) Location of all proposed buildings and their proposed uses;
 - (2) Location of driveways and parking areas;
 - (3) Indicate front, rear, and side yard setbacks proposed;
 - (4) Indicate square footage and dimensions of all proposed lots; and
 - (5) Location of all easements, width and purpose.
- (b) LANDSCAPE PLAN: The landscape plan shall be prepared at a scale of one inch equals fifty feet and shall contain the following information:
- (1) Indicate areas for berming, and sodding;
 - (2) Indicate the location of proposed plantings, identify plant materials as shade tree, flowering tree, coniferous tree, or shrubs;
 - (3) Indicate any existing vegetation; and
 - (4) Indicate any trees to be removed.
- (c) GRADING AND DRAINAGE PLAN: The grading and drainage plan shall be drawn at a scale of one inch equals fifty feet, one hundred feet or two hundred feet and shall contain the following information:
- (1) Existing and proposed grades with a minimum of two (2) foot contour intervals to a known sea level datum;
 - (2) Sufficient spot elevations on all proposed hard surface areas;
 - (3) Estimated runoff of the area based upon ten and one hundred year storm events;
 - (4) Provisions to carry runoff to the nearest adequate outlet, such as a storm drain, natural drainage way, or street;
 - (5) Location of any proposed ponding areas, indicating the size and depth of the pond and amount of acre feet of water to be stored;

-
- (6) Finished floor elevations of all buildings.
 - (7) Identify soils by type and location, including identification of the water table, and suitability of soil for the proposed development; and
 - (8) Identify any areas located in a flood hazard zone as identified by the Department of Natural Resources.
- (d) TOPOGRAPHIC MAP: The topographic map shall be drawn at a scale of one inch equals one hundred feet and shall contain the following information:
- (1) Two foot contour intervals;
 - (2) Indicate water courses, rock outcroppings, and other significant land features;
 - (3) Use USGS datum for mapping.
- (e) FLOOR PLANS AND ELEVATIONS: All floor plans and elevations shall be drawn to a legible scale and include the following information:
- (1) Floor plans indicating square footage and dimensions of all proposed rooms and areas within the structure, identifying bedrooms, kitchens, garage areas, utility rooms, closets, bathrooms, etc.; and
 - (2) Elevations of the proposed building, identifying exterior treatment, such as materials to be used and the color of paint.
- (f) PRELIMINARY PLAT: If a subdivision is required, the preliminary plat shall be prepared in accordance with the Blaine Code of Ordinances, Chapter 18 - Subdivisions.

29.891 Final Plan Required

- (a) FINAL SITE PLAN: The final site plan shall be prepared at a scale of one inch equals fifty feet, one hundred feet, or two hundred feet, and shall contain the following information:
- (1) Location of proposed units;
 - (2) Location of proposed driveways and parking areas;
 - (3) Indicate front, rear, and side yard setbacks; and
 - (4) Indicate square footage of lots and dimensions of lots.

-
- (b) FINAL LANDSCAPE PLAN: The final landscape plan shall be drawn at a scale of one inch equals fifty (50) feet and shall contain the following information:
- (1) Plant types (botanical and common names), number, location, size, and method of installation;
 - (2) Areas to be sodded;
 - (3) Indicate existing vegetation; and
 - (4) Indicate trees to be removed.
- (c) FINAL GRADING AND DRAINAGE PLAN: The grading and drainage plan shall be drawn at a scale of one inch equals fifty feet or one hundred feet or two hundred feet and shall contain the following information:
- (1) Existing and proposed grades with a minimum of two (2) foot contour intervals to a known sea level datum;
 - (2) Sufficient spot elevations on all proposed hard surface areas;
 - (3) Estimated runoff of the area based upon ten and one hundred year storm events;
 - (4) Provisions to carry runoff to the nearest adequate outlet, such as a storm drain, natural drainage way, or street;
 - (5) Location of any proposed ponding areas, indicating the size and depth of the pond and amount of acre feet of water to be stored;
 - (6) Finish floor elevations of all buildings;
 - (7) Identify soils by type and location, including identification of the water table, and suitability of soil for the proposed development; and
 - (8) Identify any areas located in a flood hazard zone as identified by the Office of Housing and Urban Development.
- (d) FLOOR PLANS AND ELEVATIONS: All floor plans and elevations shall be drawn to a legible scale and include the following information:
- (1) Floor plans indicating square footage and dimensions of all proposed rooms and areas within the structure, identifying bedrooms, kitchens, garage areas, utility rooms, closets, bathrooms, etc...; and

-
- (2) Elevations of the proposed building, identifying exterior treatment, such as materials to be used and the color of paint.
 - (e) FINAL PLAT: If a subdivision is required, the final plat shall be prepared in accordance with the Blaine Code of Ordinances.
 - (f) With the final plans, the developer shall submit, for approval by the City, a development schedule for construction of all structures and open space and recreational facilities.

29.892 Standards

In order to provide maximum flexibility, no fixed standards shall apply to the Residential Flex District. However, the City Council shall consider for any proposed use the regulations prescribed in other sections of the Zoning Code for the classification most closely resembling the proposed use. It is the intent that the Planning Commission shall consider and recommend to the City Council appropriate restrictions in connection with each individual application and site development plan for rezoning.

29.893 Compliance

No development shall occur nor shall any building permits be issued for any construction that is not in accord with the approved final plans.

Participants

Francis Fogerty
Mayor, City of Blaine

Ron Henrickson
Planning Coordinator
City of Blaine

Jerry G. Mortenson
City Engineer
City of Blaine

Don Hardle
President
Good Value Homes

John Peterson
Director of Land Development
Good Value Homes

Jim Adams
Vice President of Construction
Good Value Homes

Kenneth G. Briggs
Director of Community
Development (Former)
City of Blaine

Michael Franzen
Planning Coordinator (Former)
City of Blaine

John R. Miller
Planner
City of Blaine

The Affordable Housing Demonstration Case Study 2

Boise, Idaho

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The Affordable Housing Demonstration project in Boise, Idaho, is Lakewood Meadow, located on approximately 30 acres in the southeastern part of the city, 7 miles from downtown, 5 minutes from the airport, and close to the freeway. The project is part of Lakewood, a 263-acre planned residential community begun in 1973. Lakewood includes 11 other individual neighborhoods of luxury, single-family homes, custom family homes, townhomes, condominiums, and apartments, each in a specific price range.

Boise was officially designated an Affordable Housing Demonstration and Bryce Peterson of Homco, Inc. was named builder/developer in September 1982. Due to market considerations, the originally planned project, Morning Sun, was dropped in the spring of 1983, to be replaced by the current project, Lakewood Meadow.

Lakewood Meadow will eventually include 250 homes built in six phases. The 52 homes in Phase I comprise the Affordable Housing

Demonstration. Homco is building at least one-third of the homes on lots purchased from Triangle Development Company. The remaining lots are being sold to other builders whose proposed plans meet the approval of the architectural control committee.

Lots are approximately 6,000 square feet and are wider than normal but not as deep. Homes are priced between \$65,000 and \$95,000 and range from 1,000 square feet to 1,700 square feet. All homes have shake roofs, brick or shingle siding, crawl spaces, two-car garages, and sodded front lawns. The homes are architecturally interesting and solidly constructed.

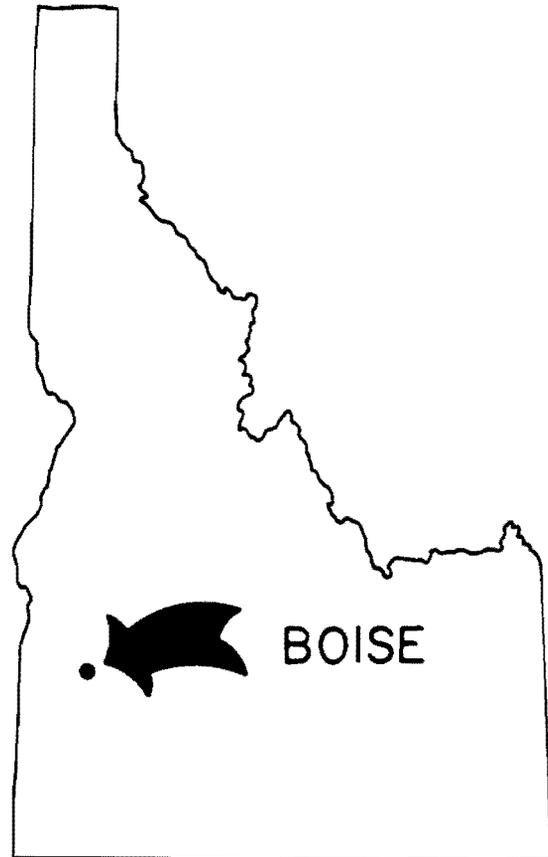
Over \$2,000 per unit was saved through changes from normal Boise standards allowed by the Ada County Highway District, the Boise City Planning/Zoning Department, and the Boise City Fire Department. These changes included smaller lots, narrower streets, sidewalks on one side only, T-turnarounds, roll curbs, and reduced setbacks.

Project Description

The Community - Boise, Idaho

Boise is the capital and largest metropolitan area in Idaho. Located in the southwestern part of the state, Boise lies in the Boise River Valley about eight miles below the mouth of a mountain canyon. It is approximately midway between Salt Lake City, Utah, and Portland, Oregon. Boise's population was 173,036 in 1980, approximately 190,000 in December 1983, and is projected to be 206,225 in 1985.

The climate is moderate, with winter snow storms that cover the nearby mountains bringing rain to the valley. Average annual snowfall is 21.6 inches, and rainfall is only 11.43 inches. The city has created a maze of ditches and canals to deliver water where it is most needed for agricultural and landscaping uses. Typical winter days are clear and cold, with temperatures ranging from 20° to 36°. Summer temperatures reach the 90° range, but nights are cool. Boise is 2,842 feet above sea level.



A lower slope at Bogus Basin,
large ski area 12 miles from Boise





Boise capitol building

Boise operates under the mayor-council form of government. The mayor and six council members serve four-year terms.

The economy of the city was originally fueled by gold from the Idaho City Strike in the early 1860's and silver from Silver City. Later, as dams were built on the Boise River, the deserts to the south and west of Boise became fertile farming areas, and Boise's industry turned more toward agriculture than mining. Today, the economy is diverse and includes a manufacturing component, a government sector, and a service sector. Several major national corporate headquarters are located in Boise providing stability and boosting per capita income. Among these are Boise Cascade Corporation, Albertson's, Inc., Morrison-Knudsen Corporation, and Ore-Ida Foods, Inc.

As Idaho's capital, Boise has a substantial share of state employees and is also the home of Boise State University. High technology firms such as Hewlett-Packard, Micron Systems, and Zilog are located a few miles west of the city.

The unemployment rate in Boise was 6.8 percent in February 1985, up 3.8 percent from the same period a year earlier, but still lower than the rest of Idaho and the United States as a whole.

Median annual effective buying income for Boise was \$23,502 in 1983, compared with \$20,510 for Idaho, according to the 1984 Survey of Buying Power Data Service.

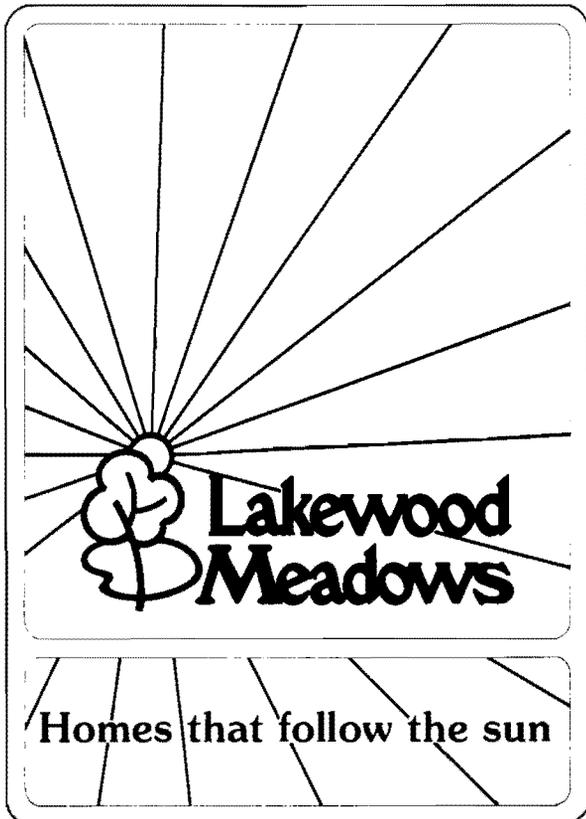
In December 1983 Boise had 71,300 households. According to the City Building Construction Annual Report, the following number of building permits were issued: 1,418 in 1978; 913 in 1980; and 471 in 1982. For the first two months of 1985, 52 new dwelling units were constructed compared to 134 in 1984.

The Builder - Homco, Inc.

Bryce L. Peterson started Homco, Inc., in 1963 and is the sole owner. Steve Yates is Vice President and General Manager. The company has built more than 700 single-family dwellings and 8 apartment projects throughout Idaho. Homco is a member of the Home Owners Warranty Corporation, the local home builders association, and the Idaho State Homebuilders Association. Triangle Development Company was formed in 1972 and includes Peterson, Fred Kopke, and John Tate. Triangle has developed many lots in Boise and is the sole developer of Lakewood.

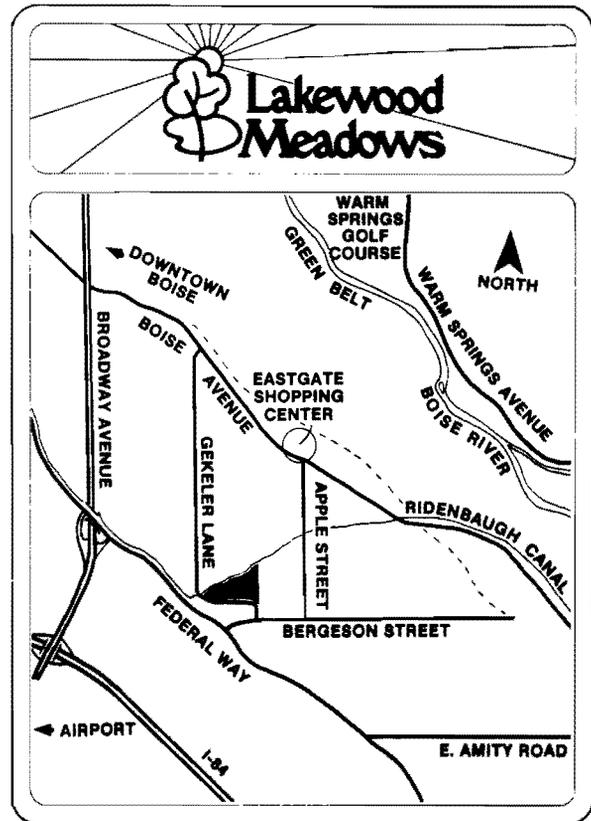
The Project - Lakewood Meadow

Lakewood Meadow, the Boise Affordable Housing Demonstration project, is located on approximately 30 acres in the southeastern part of the city, 7 miles from downtown, 5 minutes from the airport, and close to the freeway. It is inside the city limits and is served by underground utilities, city sewer and water, city bus service, and a nearby city fire station.



The subdivision is part of Lakewood, a 263-acre planned residential community begun in 1973. The land was formerly owned by David and John Tate, who built the Triangle Dairy on the site in 1923. The cattle were moved from the property in early 1970, but the Triangle Dairy remains a working dairy and includes a processing plant and an old adobe home. The owners have no immediate

plans to close the dairy and intend to preserve the historic red barn and silo and adobe home as a dairy museum.



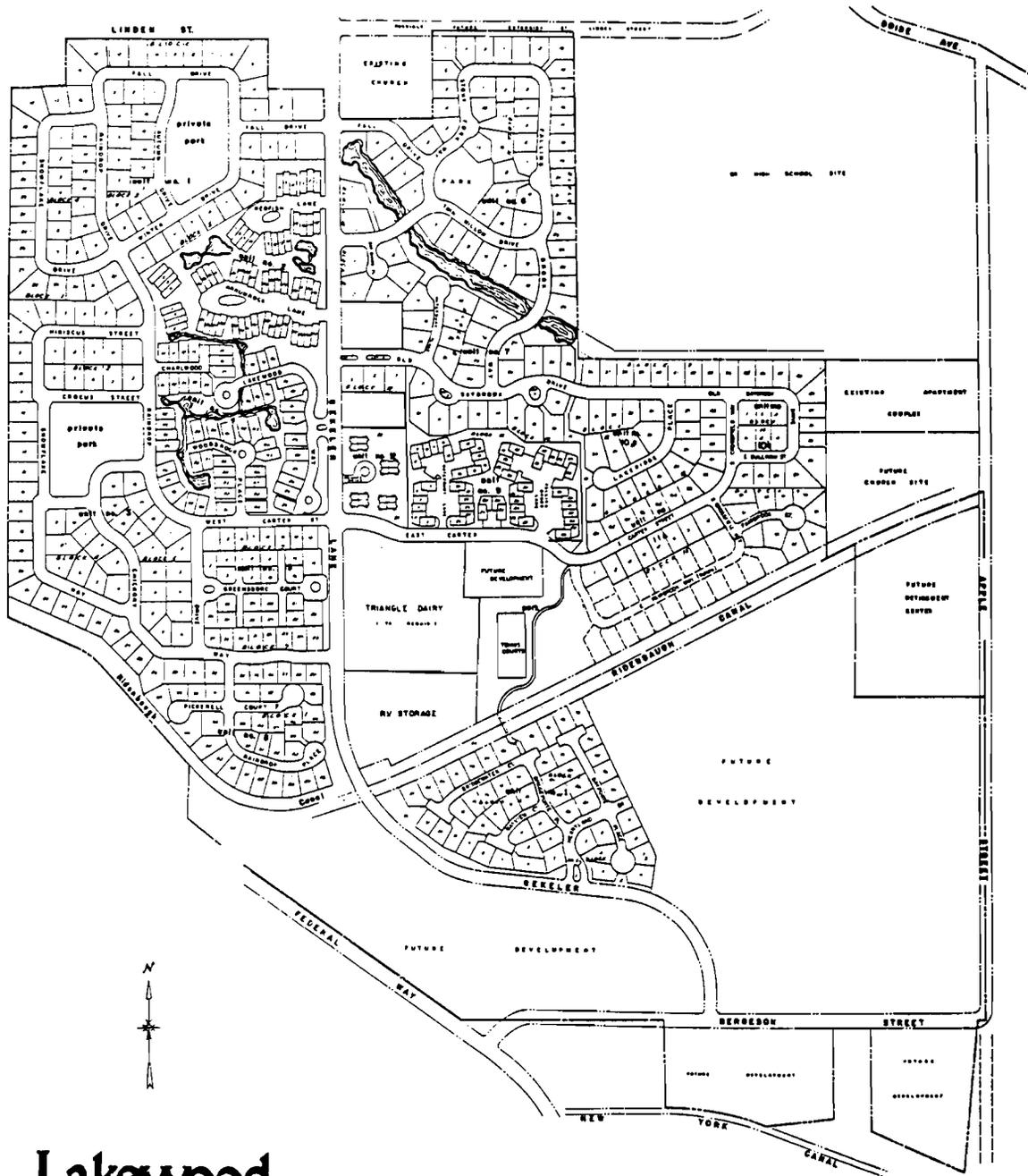
In addition to the Triangle Dairy and Lakewood Meadow, Lakewood includes 11 other individual neighborhoods of luxury, single-family detached homes, custom family homes, townhomes, condominiums, and rental apartments, each in a specific price range. All Lakewood residents belong to homeowners associations which maintain the property, pools, parks, and common areas of their own



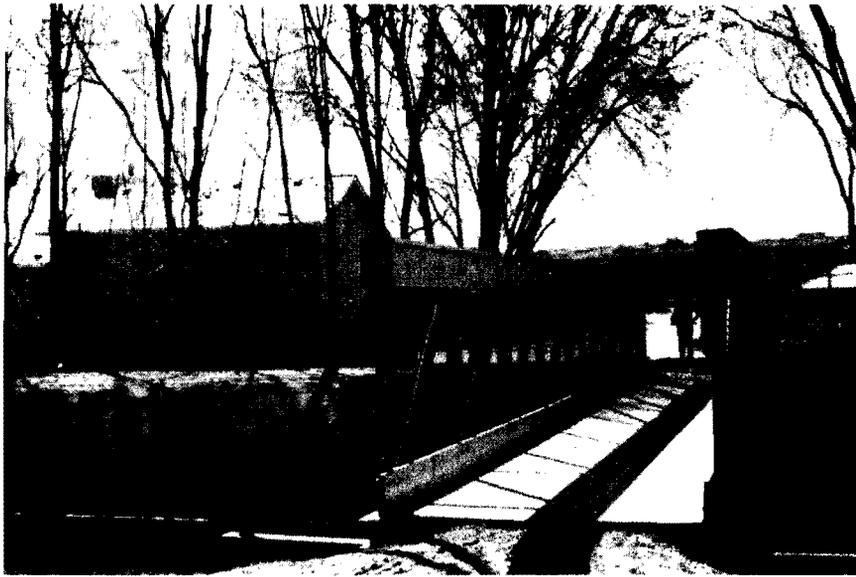
neighborhoods. The community also has tennis courts and a clubhouse, a recreational vehicle storage area, and parcels for future development.

Lakewood abuts a senior high school site, an existing church and proposed church site, a proposed retirement center, and an existing apartment complex.

The community has several man-made canals, small ponds, and streams. The Ridenbaugh Canal crosses Lakewood, forming the northern boundary of Lakewood Meadow; it is part of the network of canals that



Lakewood



Bridge over
Ridenbaugh Canal



Jogging path along canal

guides water from the mountains into the relatively dry, flat Boise areas for irrigation. When water is allowed into the canals in early spring, the water table of surrounding areas rises to about 5 feet beneath the surface. The canal is landscaped as a greenbelt and is lined with jogging paths connecting with other private pathways in Lakewood, making the entire community accessible to walkers, runners, and bikers.

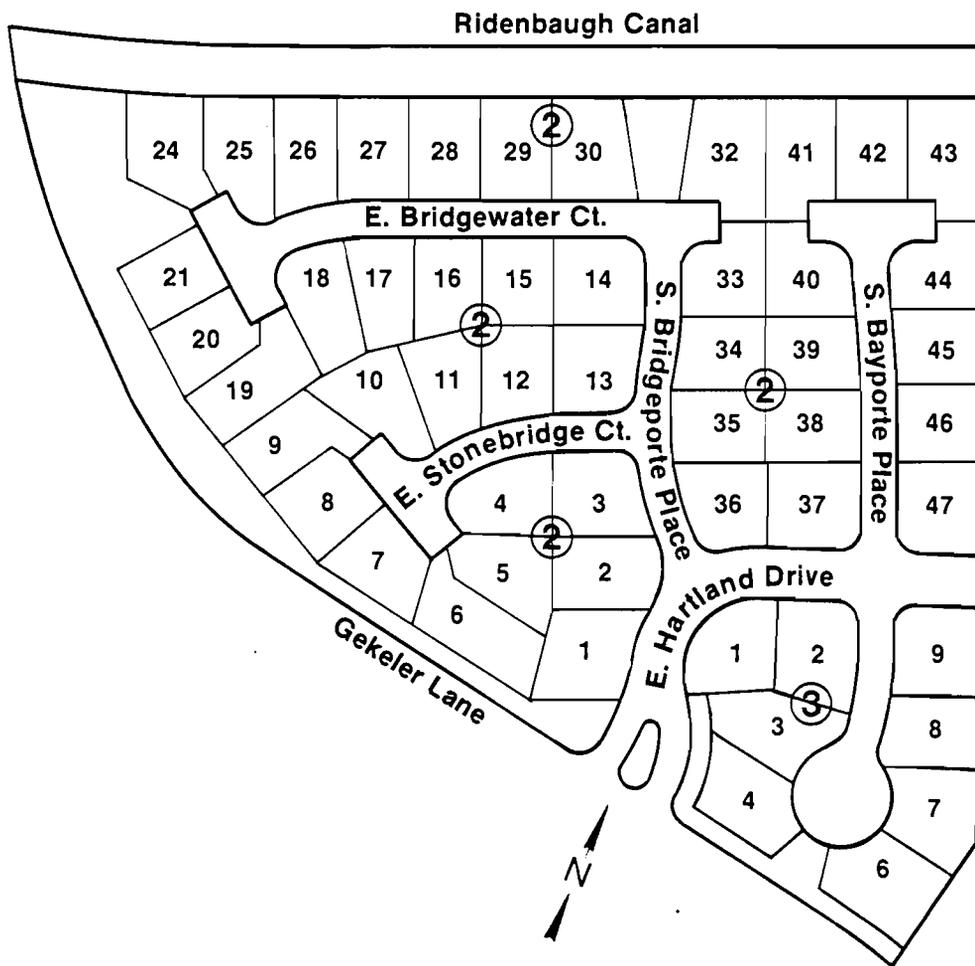
Triangle Development Company is the Lakewood developer. Fred Kopke, a member of the Tate family, and Homco President, Bryce Peterson, were the original Lakewood builders. By 1985, several other local builders had developed and built Lakewood neighborhoods. Builders purchase lots singly or in groups from Triangle Development Company. An architectural control committee appointed by the Triangle Development Board of Directors must approve the

builder's proposed plans for the lot or lots prior to purchase. Architectural control remains with the development company until the last home in the particular subdivision is sold, when it transfers to the subdivision homeowners association. Lakewood Meadow will eventually include 250 homes built in six phases; the 52 homes in Phase I comprise the Affordable Housing Demonstration. Homco is building at least one-third of the homes on lots purchased from Triangle Development Company. The remaining lots are being sold to other builders whose proposed plans meet the approval of the architectural control committee.

Lots are approximately 6,000 square feet and are wider than normal but not as deep. The homes are priced between \$65,000 and \$95,000 and range from 1,100 square feet to 1,700 square feet. All homes have shake roofs, brick or shingle siding, crawl spaces, microwave ovens, two-car garages, fans, and sodded front lawns. The homes are architecturally interesting and solidly constructed. The six Homco models emphasize proper installation of energy-saving products for greater energy efficiency and carry the Thermal Crafted Home Certificate.



Lakewood Meadow model unit



Lakewood Meadow

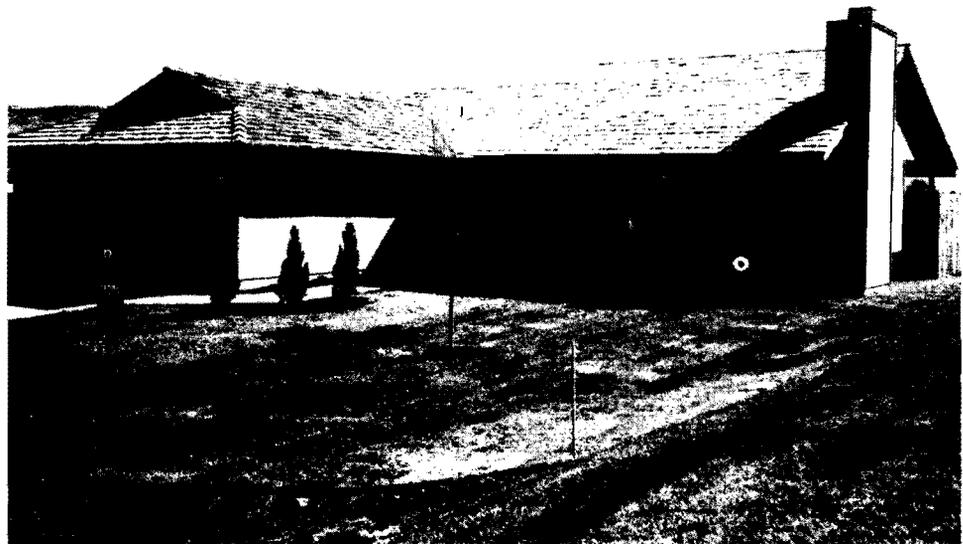


Irrigated park in Lakewood Meadow

The Market

The builder contracted with a reputable marketing firm to conduct an extensive market study of the Boise area in March 1983. The study surveyed 3,782 people in the area (about 6 percent of the Ada County

population) on what they would like to have in a new affordable house. Results showed target buyers preferred 70-foot-wide lots, well constructed, single-family homes, and interior amenities. Townhomes and condominiums were rejected.



Typical Lakewood Meadow units



ALL ABOARD!



For a *Free* Tour of Lakewood Today on the Boise Tour Train!

Whistle Stop to 14 New Homes
 SATURDAY-SUNDAY 1:00-5:00 P.M.
 Your Best Bet for an exciting weekend is the free Boise Tour Train excursion through beautiful Lakewood. You'll see that Lakewood is "Still the One" preferred community in Boise and today new things are happening.
 So climb aboard and chug past the tennis courts and four private parks roll alongside the lakes and waterways step off for an inside look at the furnished models and homes by six veteran builders.

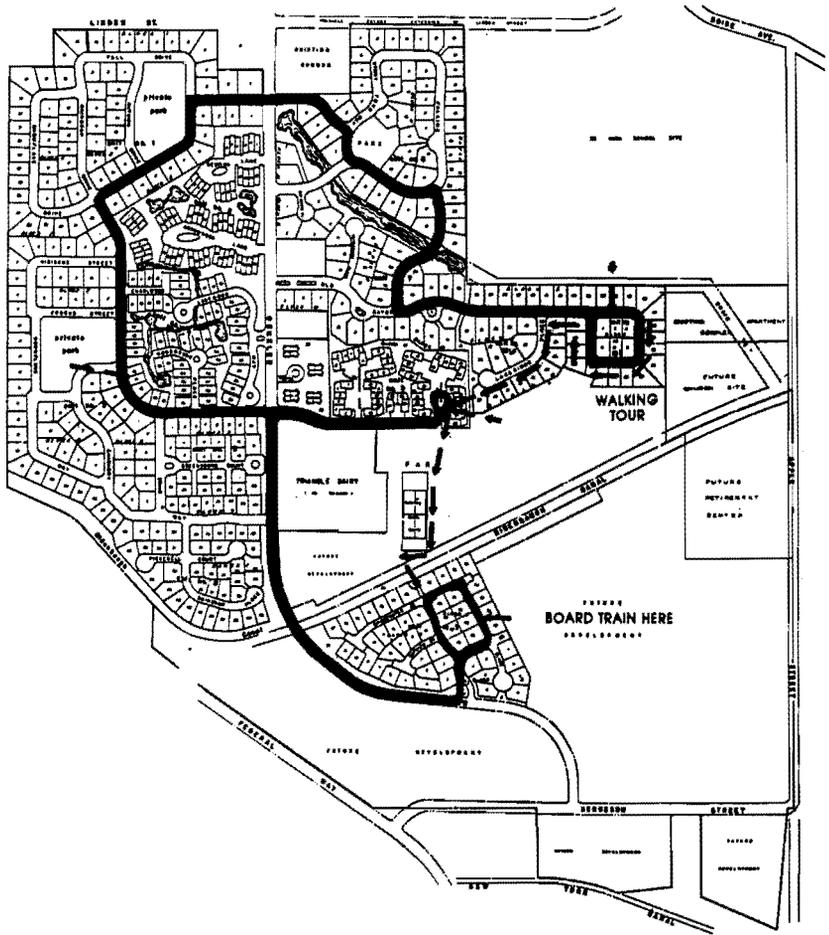
Be the first to see the six new homes in Lakewood's newest neighborhood - exciting Lakewood Meadow - with its T system roadways, extensive walkways and fenced jogging path.
 See them all: Village Green Condominiums from \$49,900; Carriage and Village Town homes, the affordable family homes in Lakewood Meadows and the luxury single family homes up to \$120,000. So o-o-o ALL ABOARD!

DIRECTIONS: Drive south on Broadway to Linden St., turn right on Cokeler Lane and continue past the dairy and over the canal to Lakewood Meadow for your free Boise Tour Train Excursion. Tel. 345-5300.

Lakewood

Lakewood Meadow opened in early September 1984. An attractive marketing brochure was available to prospective buyers who visited the model home/office. Newspaper news and feature articles highlighted the project's status as an Affordable Housing Demonstration, and advertisements informed the public of its location. Also, Triangle sponsored a weekend train excursion through Lakewood, featuring Lakewood Meadow as the newest neighborhood within the planned community.

Seventy-five percent of the homes in Phase I were sold by June 1985. Buyers are first or second home owners, professional couples earning \$40,000 - \$50,000 a year, without children or with very young children.



Lakewood

Project History

Boise city officials were interested in joining the Affordable Housing Demonstration program in the early fall of 1982. The mayor wrote to the Department of Housing and Urban Development (HUD) supporting the city's participation and offered the cooperation of the city staff and city council in reviewing proposed changes to reduce the cost of homes in the project. Bryce Peterson, local builder/developer, was selected for the project.

HUD officially designated Peterson and the city of Boise participants in the Affordable Housing Demonstration program in September 1982.

Mayor Richard Eardley said, "Boise has been doing some of this type thing (relaxing regulations, etc.) for almost a year now. The demonstration project will allow us to try our proposed changes in a test situation with an eye toward implementing them as standards in the near future." According to Susan Stacy, Boise Planning Director, the Idaho Home Builders Association (HBA) was also working toward reducing housing costs by encouraging communities to accept smaller lots.

Original Project - Morning Sun

Upon acceptance into the program, Peterson began negotiations with Comus FCI Ltd. Partnership (Julian Ray) to purchase land in the northwest section of Boise. Preliminary site planning and unit design began in December 1982, before purchase of the lots.

Representatives from HUD, NAHB, and the NAHB Research Foundation visited in Boise with the builder, developer, and city department directors and state highway representatives to begin planning the cost-saving

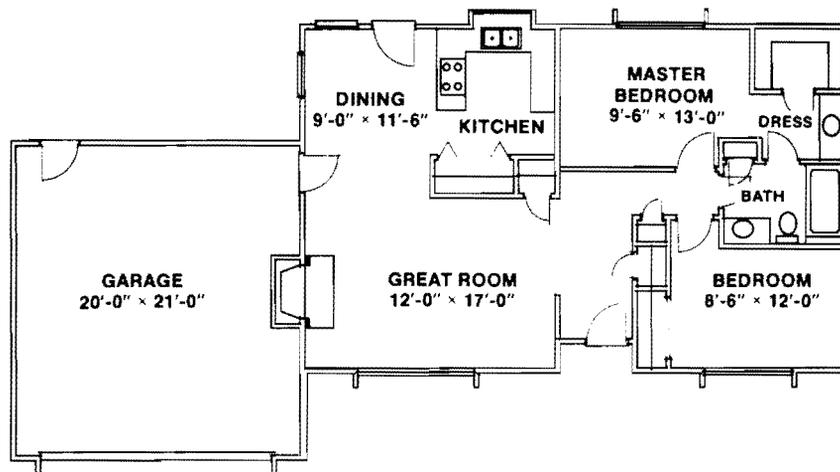
aspects of the subdivision in January 1983. Bryce Peterson organized a meeting during which HUD and the NAHB/RF representatives presented an overview of the demonstration and answered questions of the city and state staffs. The Boise fire chief was especially concerned about the safety of the narrower streets and elimination of cul-de-sacs in favor of T-turnarounds.

By March 1983 proposed plans for the 21.3-acre demonstration, called Morning Sun, were ready for submittal to the city. Phase I, 5.37 acres, was proposed as 33 single-family homes on 4,000- to 5,000-square-foot lots. A typical lot was 4,225 square feet. Phase II, 16.0 acres, was to be 211 single-family units, townhouses, and condominiums on 3,286-square-foot lots. Five acres of the site were zoned R-1C, and 16.3 acres were zoned R2. A Planned Unit Development (PUD) designation allowed the combining of the two zones and averaging the density for a total of 244 units.

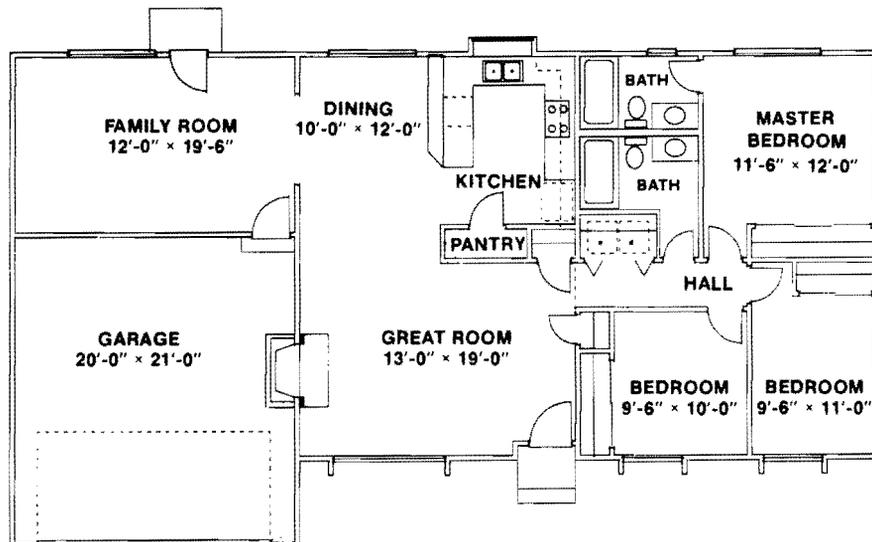
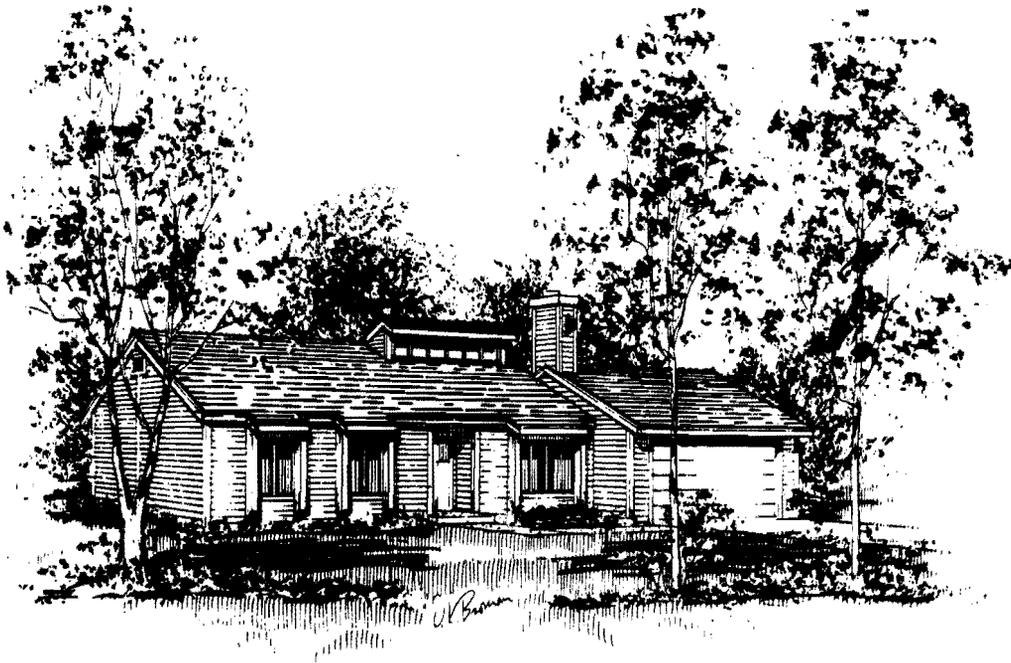
By June 1983 the Morning Sun plan was approved by Ada County Highway District (the state office responsible for roads), the Boise Fire Department, and Boise City Planning and Zoning. The city and state highway department had approved narrower street rights-of-way, a 3-foot sidewalk on one side only, smaller than normal lots, T-turnarounds, and reduced setbacks. The homes were designed at 900 to 1,200 square feet to be priced at \$48,000 to \$58,000. Groundbreaking was planned for August 1983.

In March 1983 while Peterson proceeded with the site planning and home designs, he contracted for a market analysis to precisely determine his target population. The

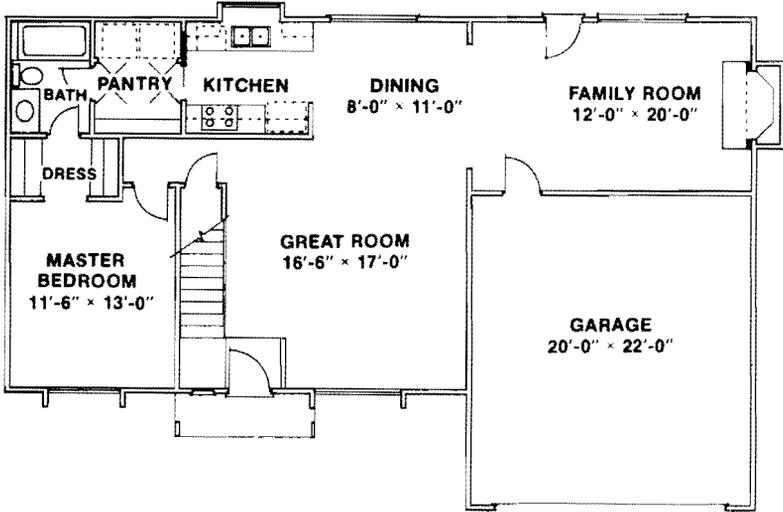
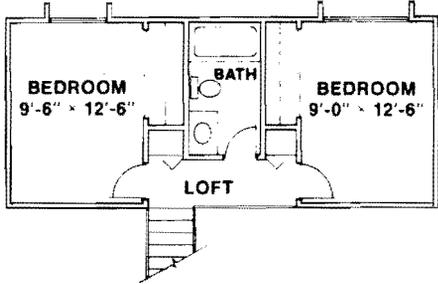
SUNBURST



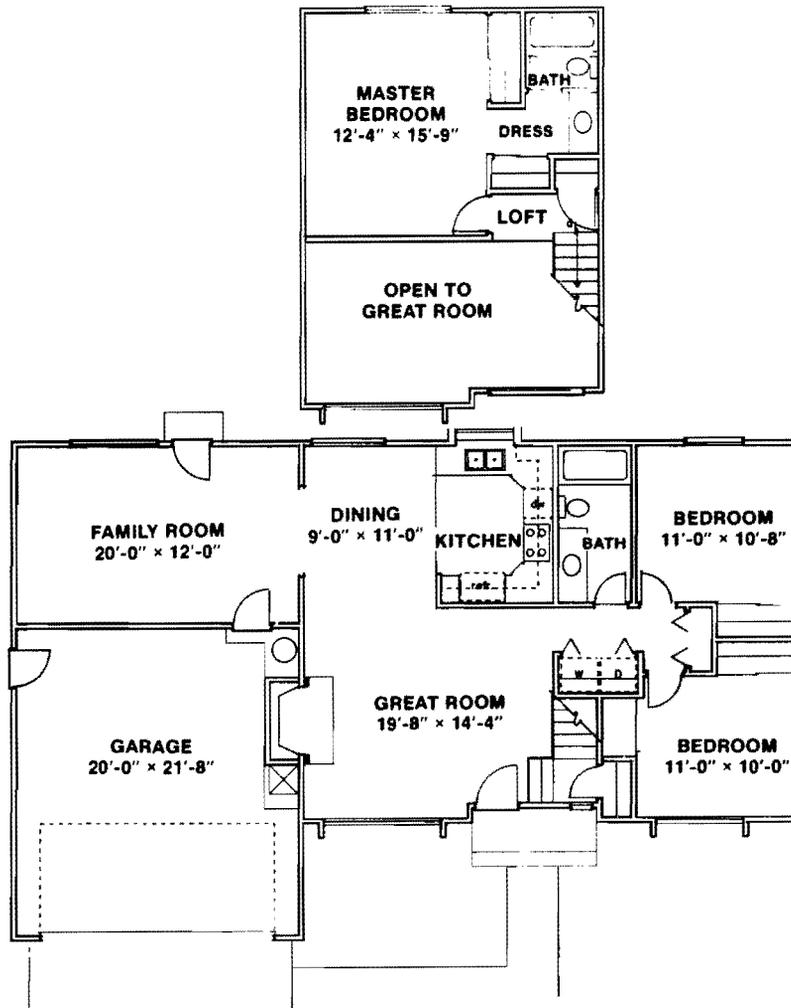
MORNING SUN



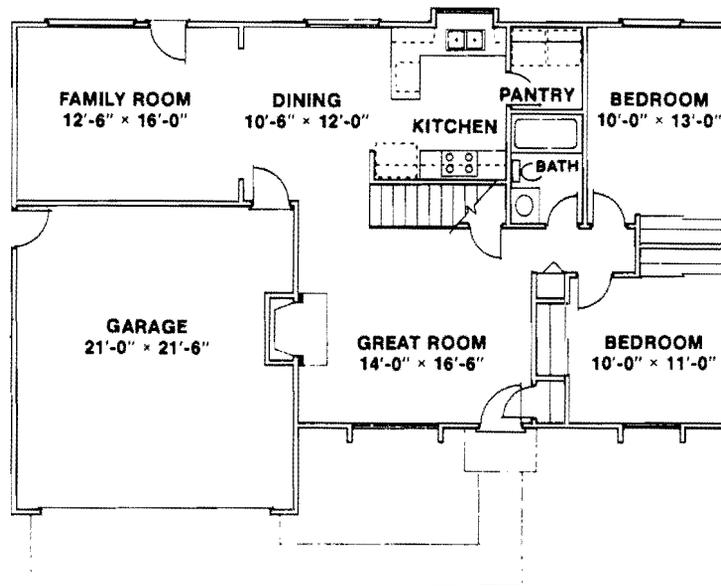
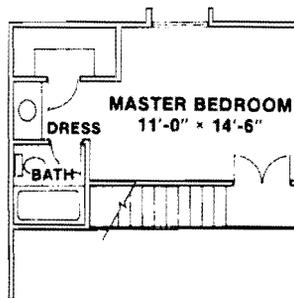
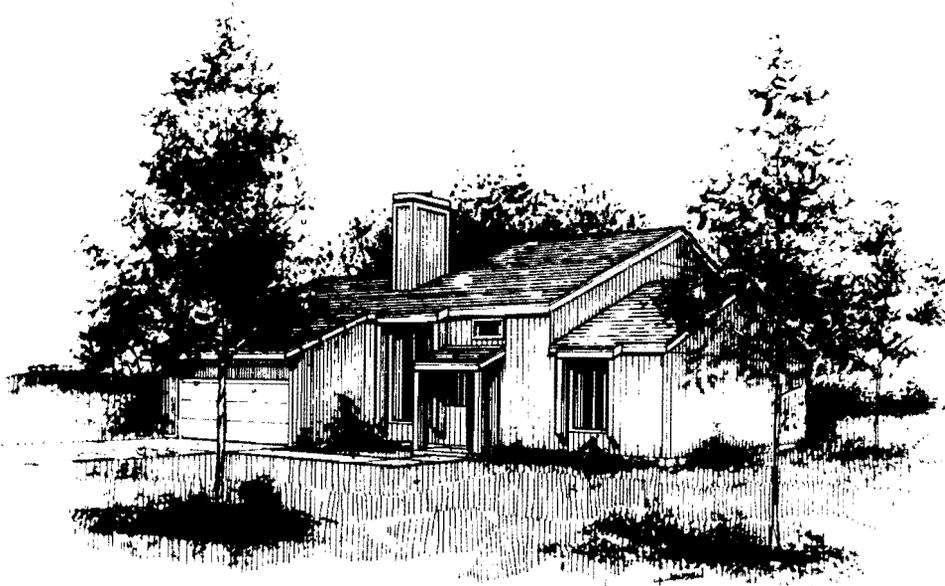
SUNWOOD



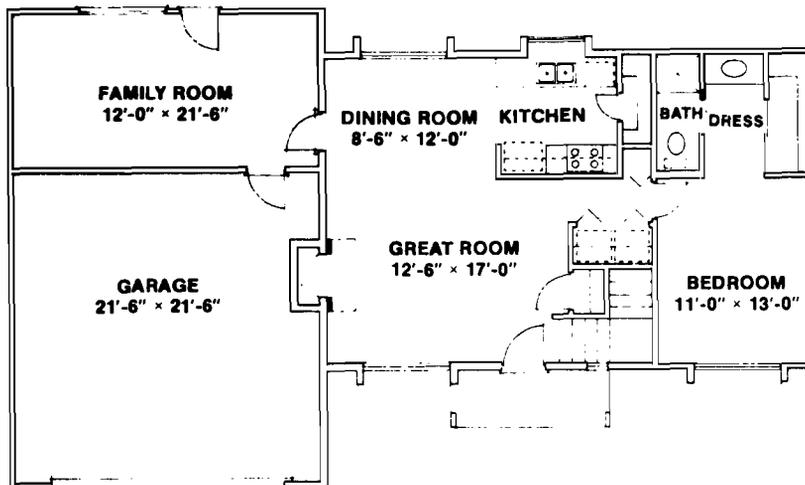
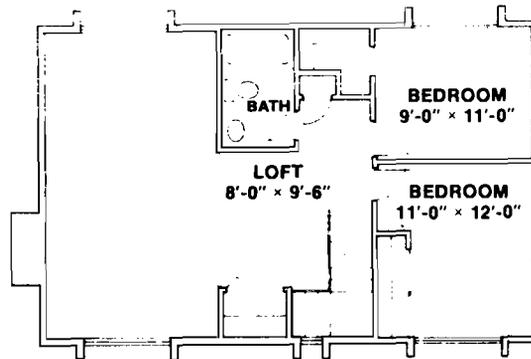
DAYBREAK

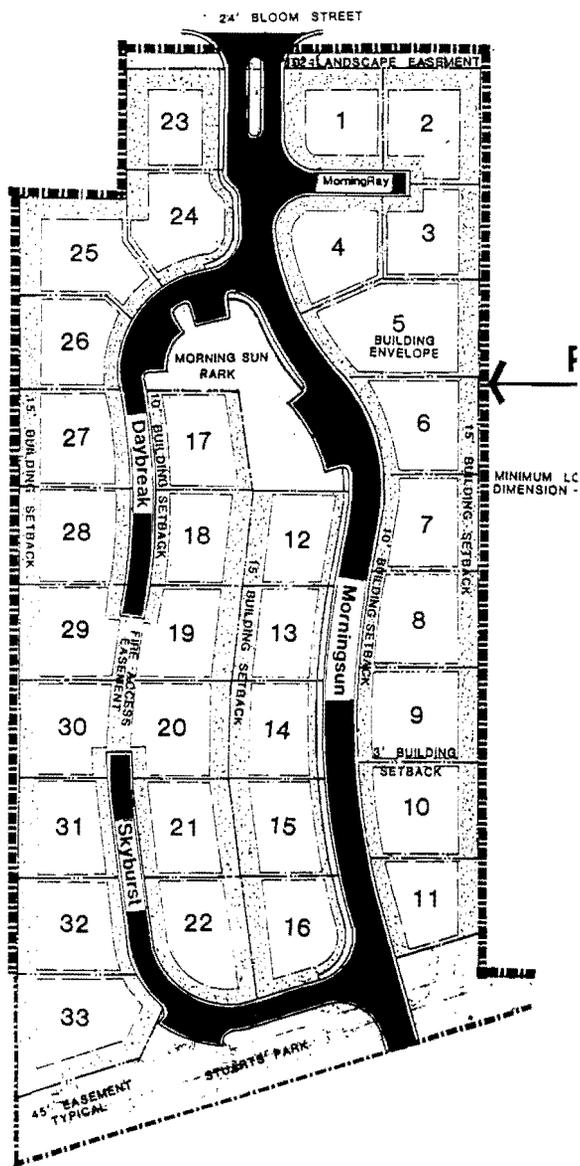


COUNTRY SUN



SUN MEADOWS





Morning Sun proposed plan

study showed that the target market, young first and second home buyers, wanted single-family detached homes, not townhouses and condominiums. The analysis showed that respondents desired homes on larger lots with wider street frontage than Peterson planned. The Morning Sun plan was for lot frontages of 40 feet to 50 feet; the market analysis identified 70 feet widths as the minimum acceptable to the target buyers.

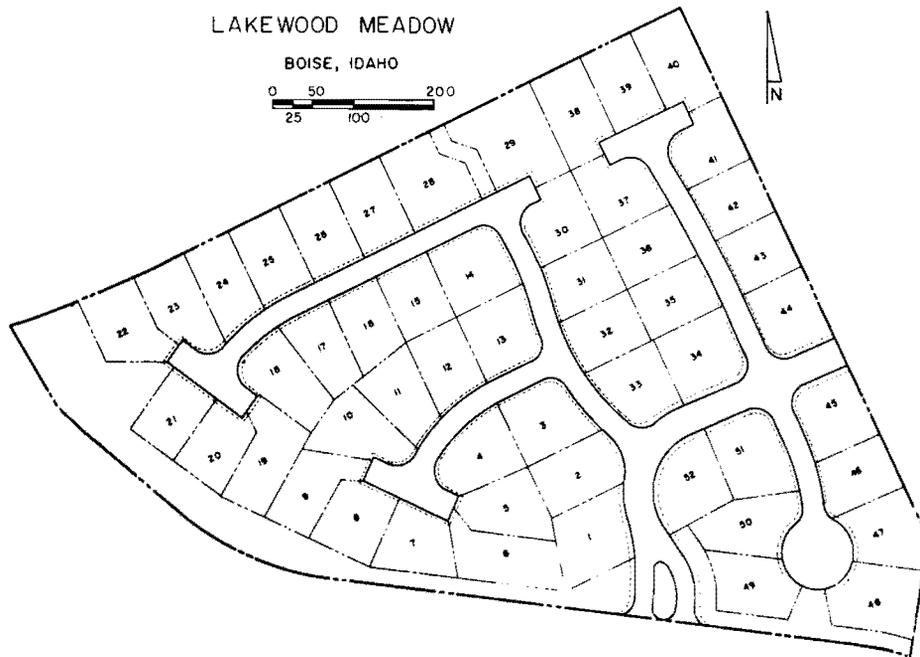
Peterson estimated that the larger lots and resulting lower density

would increase lot costs 50 percent. This in turn raised the projected cost of the homes beyond the price the target market could afford.

Lakewood Meadow

As a result of the market study, Peterson abandoned the Morning Sun project and looked for land in a more affordable price range. He decided to build the Affordable Housing Demonstration as a subdivision in Lakewood, the 263-acre planned residential community described in Chapter 1. The project, renamed Lakewood Meadow, demonstrates the achievement of an affordable housing segment in an area of more luxurious, expensive homes in the most desirable section of town. Lakewood has the reputation of a fine place to live; the majority of homes are priced over \$100,000. By designing smaller lots, narrower streets, a sidewalk on only one side of the street, T-turnarounds instead of cul-de-sacs, and roll curbs, and by increasing overall density, Peterson was able to sell Lakewood Meadow homes for less than other Lakewood homes and other comparable Boise homes. Lakewood Meadow homes, however, retain similar amenities, architectural style, and sound construction of other Lakewood homes.

Triangle Development, developers of the entire Lakewood project, originally offered Lakewood Meadow lots for sale to Homco and five other builders. In August 1984 one local builder who was not included in this group sued Homco under the Sherman Anti-Trust Act for not opening up the lots to all builders meeting the architectural control requirements for the lots. The trial lasted from January 1 to February 1, 1985, during which time Triangle was not allowed to sell lots. The plaintiff won the case, and Lakewood Meadow was opened in February 1985 to all builders meeting the requirements.

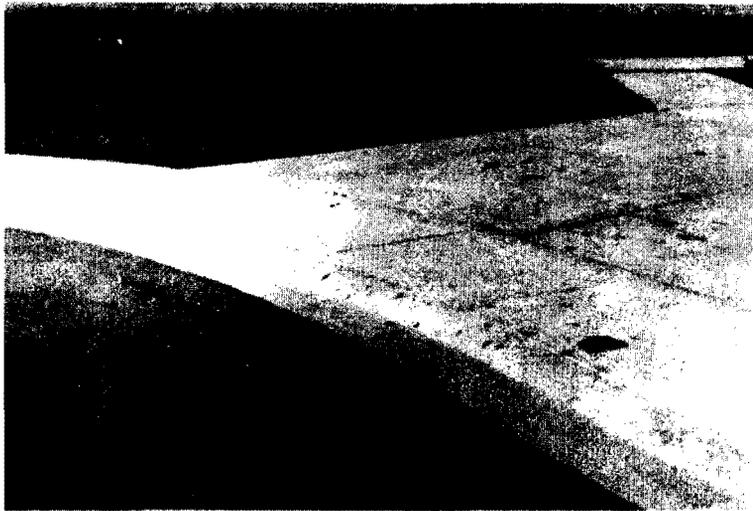


Lakewood's entire 263 acres are zoned as a Planned Unit Development (PUD). Originally, the city approved 1,500 living units for the community with lots averaging 6,000 square feet. Peterson needed specific approval of the proposed land plan for Lakewood Meadow by the Ada County Highway District, the Boise City Planning/Zoning Department, and the Boise City Fire Department.

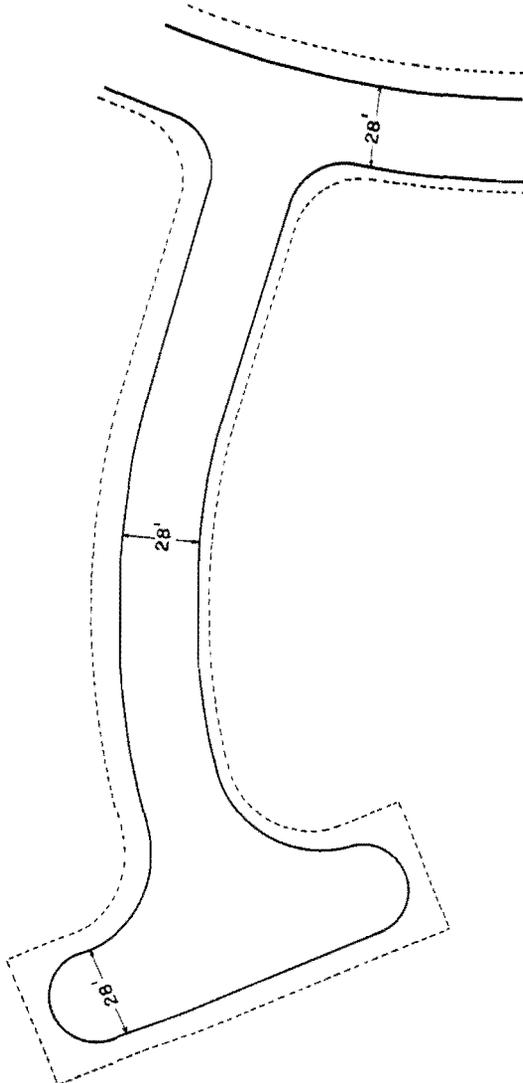
Because Lakewood is an established and respected community, approvals for Lakewood Meadow were not difficult to obtain. Changes Homco and Triangle requested were allowed under the PUD or were permitted on a one-time basis for the demonstration. The City of Boise, still interested in the demonstration, permitted Triangle to use the changes already



Lakewood Meadow unit under construction



Typical
Lakewood Meadow
roll curb



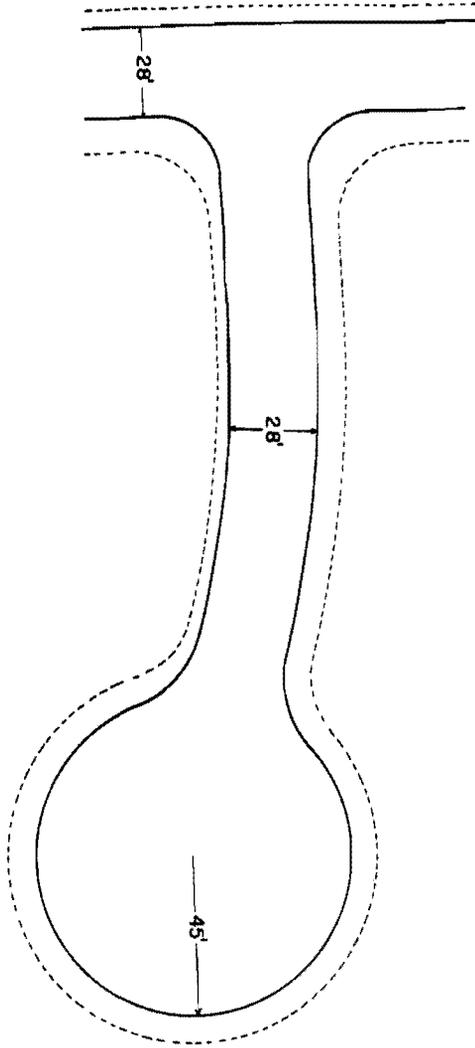
approved for Morning Sun at Lakewood Meadow. These included—

- Smaller lots
- Narrower streets
- Sidewalk on only one side
- T-turnarounds
- Roll curbs
- Reduced setbacks

Although the fire chief expressed concern about the T-turnarounds and narrower streets, these were approved. After the site development work was complete, he visited Lakewood Meadow to test the Boise fire equipment on the T-turnarounds and narrowest roads. To his surprise, the equipment performed adequately, and he became a proponent.

T-turnaround

Cul-de-sac



**Lakewood Meadow
T-turnaround**

Changes and Their Impacts on Costs

One purpose of the Affordable Housing Demonstration Program is to collect and evaluate information and data related to the approval process, residential development practices, and construction techniques. The following discussion seeks to identify modifications in regulations and standards that can result in reducing costs for new home buyers. Cost savings of each variance from Boise's standards and Homco's typical practice are discussed and compared.

Density/Rights-of-Way

Phase I of Lakeview Meadow contained 13.3 acres of land. Boise allowed Homco to reduce rights-of-way (ROW) from 50 feet to 35 feet on 1,440 of the 1,890 lineal feet of street.

Three T-turnarounds and one standard 50-foot-radius cul-de-sac were approved instead of four 50-foot-radius cul-de-sacs. The total area of rights-of-way was reduced by over 35,837 square feet. Since the average lot size was 7,319 square feet, enough land was saved to build 5 units more than would have been possible using existing standards. Instead of 52 units, Homco could have built only 47 units.

Following is an analysis of Lakewood Meadow land use.

At \$25,000 per acre, total raw land cost was \$332,500. Because of the increase in density from 47 to 52 units, land cost per unit was reduced from \$7,074 to \$6,394, a savings of \$680 per unit.

Density/Rights-of-Way Cost Comparison

	Demonstration		Comparison	
	Square feet	Acres	Square feet	Acres
Rights-of-way	93,879	2.15	129,716	2.98
Common areas	105,393	2.42	105,393	2.42
Building lots	380,608	8.73	344,771	7.90
TOTALS	579,880	13.30	579,880	13.30

Streets/Paving

The standard Boise residential street width requirement is 37 feet. For the demonstration, paving width was reduced to 28 feet on all streets except the main collector, Ridgefield Drive. In addition,

90-foot-diameter cul-de-sacs are required by the city. For Lakewood Meadow, three T-turnarounds were allowed and one conventional cul-de-sac was used, saving 8,586 square feet of paving. Total paving was reduced by 21,546 square feet. Total cost reduction was as follows:

Street/Paving Cost Comparison			
	Demonstration	Comparison	Savings
Conventional			
37' wide asphalt street	-	\$59,441	-
45' radius cul-de-sac	-	21,631	-
Demonstration			
28' wide asphalt street	\$34,272	-	-
28' T-turnaround	8,925	-	-
37' wide street	14,153	-	-
45' radius cul-de-sac	5,408	-	-
TOTALS	\$62,758	\$81,072	\$18,314
COST PER UNIT	\$ 1,207*	\$ 1,725**	\$ 518
*52 Units			
**47 Units			

Curbs and Gutters

Typically, Boise requires 6-inch-high vertical curbs. In Lakeview Meadow, roll curbs were allowed on all

streets except the 37-foot-wide collector, Ridgefield Drive. Total roll curb length was 3,720 feet and vertical curb length was 1,063 feet. Following is a comparison of costs.

Curb and Gutter Cost Comparison			
	Demonstration	Comparison	Savings
Roll curbs	\$16,740	-	(\$16,740)
6" vertical curbs	6,112	\$27,502	21,390
TOTAL	\$22,852	\$27,502	\$ 4,650
COST PER UNIT	\$ 439*	\$ 585**	\$ 146
*52 Units			
**47 Units			

Sidewalks

Typically, sidewalks are installed on both sides of residential streets in Boise. For the demonstration, sidewalks were installed on one side only and eliminated altogether on T-turnarounds. Walkways were built in common areas and leading to a bridge over Ridenbaugh Canal.

Sidewalks were installed along both sides of the collector street and along one side of the adjacent arterial street, Gekeeler Lane. If built to Boise standards, 6,512 lineal feet of public sidewalk would have been required. In Lakewood Meadow, 3,816 lineal feet of sidewalk were installed. Following is a cost comparison.

Sidewalk Cost Comparison			
	Demonstration	Comparison	Savings
4-foot-wide sidewalk	\$11,448	\$19,536	\$8,088
Cost per unit	\$ 200*	\$ 416**	\$ 216
*52 Units			
**47 Units			

Utilities/Storm Water Management

No changes were made in Lakewood Meadow underground utilities or surface storm water drainage. Because of nearby mountain snow melt and irrigation canals, the Lakewood section of Boise has an extremely high water table--about 5 feet below the surface. Therefore, utility trenching must be completed by mid-spring.

Surface storm water drainage is typical in Boise. In Lakewood Meadow, drainage was directed to a rock-lined swale alongside Ridenbaugh Canal. Easements for drainage were provided along property lines where appropriate.

Because of the increase in density from 47 to 52 units, total utility costs were decreased on a per-unit basis. Following is a cost comparison.

Utility/Storm Water Drainage Cost Comparison			
	Demonstration	Comparison	Savings
Sanitary sewer	\$69,576	\$69,576	-
Water service	63,804	63,804	-
Electric service	57,033	57,033	-
Street lights	9,700	9,700	-
Storm water drainage	18,000	18,000	-
Landscaping	6,400	6,400	-
TOTALS	\$224,513	\$224,513	-
COST PER UNIT	\$ 4,318	\$ 4,777	\$459
*52 Units			
**47 Units			

Building Design and Construction Changes

About two-thirds of the lots in Lakewood Meadow were sold to other builders, Homco retaining one-third. Traditional construction methods were used throughout with one exception. Homco installed polybutylene supply

plumbing instead of the more traditional copper at an estimated savings of \$100 per unit.

Total Cost Savings Summary

Following is a summary of all cost savings for the Boise demonstration project.

Savings Per Unit	
Reduction of R.O.W.	\$680
Streets/paving	518
Curbs and gutters	146
Sidewalks	216
Utilities/storm water management	459
Polybutylene supply piping	100
TOTAL	\$2,119

The Affordable Housing
Demonstration
Case Study 3

Broward County (Coral Springs), Florida

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Coral Springs is located in southeast Florida in Broward County about halfway between Miami and Palm Beach. In 1979 median family income for the city was \$25,753. In 1984 the average price of a new single-family home was approximately \$152,000.

Coral Springs' Affordable Housing Demonstration, Village Pointe at Coral Springs, was announced in January 1982 as a joint venture of Broward County, the City of Coral Springs, and developer Coral Ridge Properties, Inc.

The demonstration portion of the subdivision was built on 11.97 acres and consists of 24 single-family detached units, 24 fee-simple townhouses, and 26 semi-detached units (buildings with two attached living units). The detached and semi-detached units range in size from 1,385 to 1,710 square feet and are priced from \$92,900. The townhouse models range in size from

1,368 to 1,388 square feet and are priced from \$86,900.

Mr. Werner Buntmeyer, president of Coral Ridge Properties, viewed the project as an opportunity to reduce costs through innovative land development techniques and streamlined local review and processing.

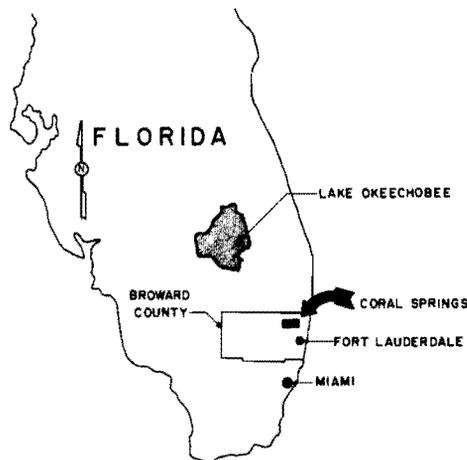
Mayor O.B. Geiger established a project team to work with the development company, and the county administrator designated an assistant to coordinate county staff efforts on the project.

The cost reducing methods employed were street width reduction, swale drainage rather than on-site retention, right-of-way reduction, and lot size reduction. Selling the townhouses on a fee-simple basis avoided the costs associated with establishing and supporting a home owner's association.

Project Description

The City - Coral Springs, Florida

The City of Coral Springs is located in southeast Florida in Broward County about halfway between Miami and Palm Beach. Broward County, Florida, is 1,211 square miles in area with a 1980 population of over one million according to the U.S. Census Bureau. The City of Fort Lauderdale is the largest population center in the county with a 1980 population reported at over 153,000. Coral Springs was incorporated in 1963 with a commission-manager form of government. The City Commission, which consists of the mayor and four commissioners, determines policy. The policy decisions are implemented by the city manager and the heads of the 12 city departments: planning, building, engineering, economic development, police, fire, utilities, public works, parks and recreation, personnel, finance, and data processing.



Coral Springs is a master planned community of approximately 25 square miles. To date, about 18 square miles have been developed. The original plan was prepared by Coral Ridge Properties, Inc., a community development subsidiary of Westinghouse Electric Corporation.

The current master plan for Coral Springs was developed by the city's own planning staff and approved by the state in 1978. Broward County has certified that the land use plan for Coral Springs is in conformance with the Broward County Land Use Plan.

The first residents moved into Coral Springs in 1966. By 1970 the population was 1,489, and by 1980 more than 37,000 people called Coral Springs home. The city population reached 59,899 as of January 1985, according to the city's planning department. The U. S. Census Bureau reported a median family income in 1979 of \$25,753 in Coral Springs. This income level placed Coral Springs first among the 20 largest cities in Florida and first for any city over 25,000 inhabitants in the eight southeastern states.

Housing construction has naturally accompanied this population growth. By 1980 the U.S. Census Bureau reported that the year-round housing inventory consisted of 12,746 units. The city building department reported the addition of another 5,649 units from October 1981 through September 1984. In 1984 the average price of a new single-family home in Coral Springs was approximately \$152,000. The following chart shows the number of housing permits issued for fiscal years 1981 to 1984:

<u>Fiscal Years Ending</u>	<u>Number of Permits Issued for Housing Units</u>
September 1981	1,526
September 1982	1,053
September 1983	2,623
September 1984	1,973

Source: Building Department
City of Coral Springs



Coral Springs, Florida
City Hall

Coral Springs was originally planned to serve as a retirement community. Young families, however, were attracted to the area. The 1980 census reported that 57 percent of the Coral Springs population was between 18 and 64 years of age, with 37 percent younger and only 6 percent older.

The County - Broward County, Florida

A report prepared in 1980 for the Economic Development Council of Broward County showed that employment in the county and in Coral Springs since the 1970's had been rooted in four major industries: tourism, construction, manufacturing, and providing goods and services to the large population of retired persons. The report pointed out that the retiree population has such an impact on the economy that providing the goods and services to this population is an identifiable industry. In 1979 34 percent of all jobs were either directly or indirectly related to tourism. The construction industry and the retirement industry each accounted for 25 percent of total employment. The remaining 16 percent of employment was in manufacturing industries.

The platting of land in Coral Springs and other jurisdictions in the county requires the approval of the Broward County government as provided for in the Broward County Charter and Land Development Code, Ordinance No. 81-16.

The county's review of development actions is coordinated by the Development Management Director, who chairs the Development Management Review Committee. The Committee consists of representatives of the county government, Florida Power & Light Company, Southern Bell Telephone, and the South Florida Water Management Division. The County Administrator may add other members to the Committee as needed to review special projects.

An application for plat approval submitted to the Director is distributed to county offices and utility companies for review. Each of these agencies submits a written staff report with comments and recommendations to the Director.

This process ensures that appropriate consideration has been given to the

impact of a residential development on the roads, schools, and parks and other activities.

In calculating the monetary value of the impact on roads, the county now uses a computer-based system called TRIPS (Traffic Review and Impact Planning System), which became available in 1982. Prior to this time, the county used a calculation method called BIZS (Broward Impact Zoning System), which resulted in higher impact estimates. As noted below, the change was one of the factors delaying final approval of the project.

The monetary value of the impact on the county school system and on the regional parks and recreational facilities is calculated following guidelines in the Broward County Land Development Code.

As part of its project approval process, the county requires a project developer to pay impact fees based upon the estimated value of these impact determinations, either as a direct payment of money or in

the form of constructed improvements to the road system or land dedicated to the school or park system. The developer can pay the fees when the plat is recorded; alternatively, he or she can defer payment of "in-kind" contributions until building permits are issued. In the latter case, the county requires the developer to guarantee that these obligations will be met; this guarantee can be in the form of a performance bond, recording a lien against the property, or as a letter of credit provided to the county.

The Developer - Coral Ridge Properties

Coral Ridge Properties, Inc., was founded in 1946 as a Florida land development company. In 1961 it purchased the 10,000 acres of farm and uninhabited land in south Florida that ultimately became Coral Springs. Three years after purchasing the land, Coral Ridge Properties petitioned the legislature to incorporate the city and a



Broward County Courthouse

development master plan. The subsequent city master plan, enforced by deed restrictions, guides development in the city and includes the placement of schools, churches, parks, shopping malls, and the like, including such details as the number and species of trees per lot.

In 1966 Coral Ridge Properties was bought by Westinghouse Electric Corporation; it continues to operate as a subsidiary in the Westinghouse Communities, Inc., division, under

Coral Ridge
PROPERTIES, INC.

the guidance of Werner Buntmeyer, President of Coral Ridge Properties, Inc.

As the community planner and developer, Coral Ridge Properties has been concerned with acquisition, planning, permitting, and preparation of land, while independent builders, both large and small, focus on building construction. This business approach has succeeded in Coral Springs, Fort Lauderdale, and other communities in central Florida and the southwest Florida coast.

The housing units in Coral Springs are the products of independent builders and developers willing to operate within the protective covenants and architectural guidelines specified by Coral Ridge Properties.

The Builder - RDK Development

The builder ultimately selected by Coral Ridge Properties for the Affordable Housing Demonstration was RDK Development Corporation, a member of the Guardian American Development Corporation family of builders. In 1984 RDK Development Corporation purchased the developed land and renamed the site Village Pointe at



Coral Ridge Properties, Inc., main offices

Coral Springs. The Guardian companies have a successful record as residential builders and land developers in Broward County dating back to 1965. Between 1981 and 1985 they have built approximately 1,200 single-family housing units in Florida ranging in price from \$70,000 to \$110,000.

Robert D. Krieff, president of RDK Development Corporation, also serves as director of the Builders Association of South Florida and as a member of the Broward County Building and Zoning Code Enforcement Board. Mr. Krieff is a past director of the Home Owners Warranty Council of South Florida and continues to serve on its advisory board.

All homes built by RDK Development have the Home Owner's Warranty Corporation's 10-year Home Owners Insurance and comply with the Florida Power and Light Company Watt-Wise Program for energy efficiency.

The Project - Village Pointe at Coral Springs

Coral Ridge Properties considered several locations within the City of

Coral Springs for the Affordable Housing Demonstration. The location finally selected was the western portion of Parcel J in the Maplewood Subdivision in the southwestern portion of the city. The area was already designated for medium density residential land use--10 to 20 units per acre--on the certified city land use plan and was zoned for 20 dwelling units per acre.

The site is on West Atlantic Boulevard about three-quarters of a mile west of University Drive. Both of these major arteries are included in the Broward County traffic way system. The site is convenient to the new Coral Square Mall at the intersection of West Atlantic Boulevard and University Drive. In addition, a cluster of shops and boutiques called Carriage Trade Shoppes is located directly across West Atlantic Boulevard. Elementary, middle, and high schools are located within a 1.5-mile radius.

Parcel J had previously been platted as part of a larger subdivision that was approved by the City of Coral Springs and Broward County in 1973. Coral Ridge Properties, however, chose to prepare a replat of the

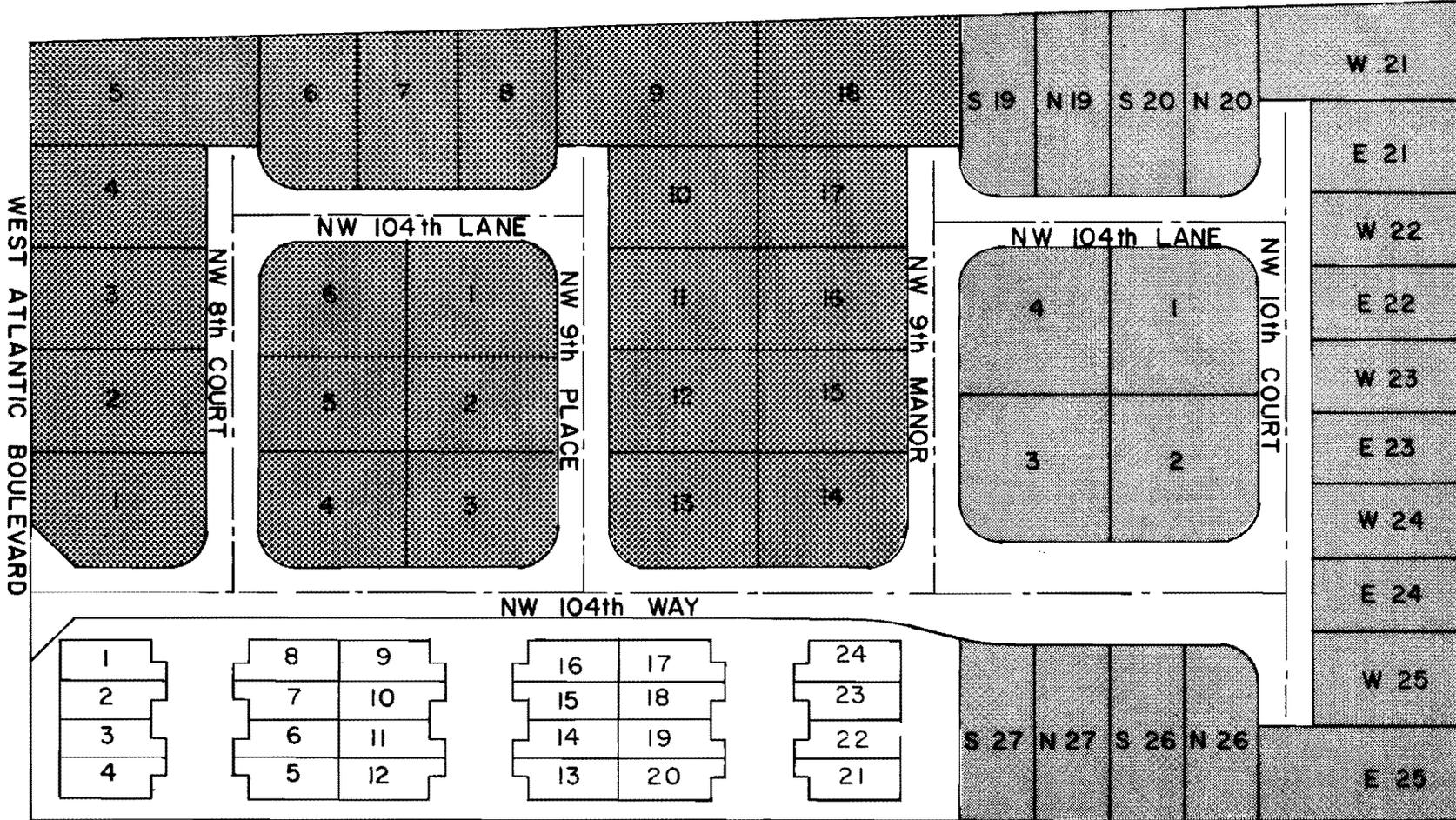
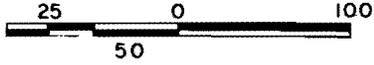


Entry to Village Pointe at Coral Springs

-  SINGLE FAMILY DETACHED
-  SEMI-DETACHED
-  TOWNHOMES

VILLAGE POINTE

CORAL SPRINGS, FLORIDA



western 11.97 acres of Parcel J and to call the development Coral Springs Village. The objective was a community of mixed housing types, including single-family detached units, semi-detached units, and townhouses. In 1984 RDK Development Corporation purchased the developed land from Coral Ridge Properties and renamed the subdivision Village Pointe at Coral Springs.

Village Pointe's single-family detached and semi-detached homes have three bedrooms, two baths, and two-car garages. All units are built on 4-inch concrete slabs with stucco-coated concrete block exterior walls and a tile roof. The only exterior wood used is for fascia. Engineered wood trusses support the roof, and pressure-treated wood is used in the framing of all load-bearing walls. All interior partitions are framed with metal studs. The objectives of these construction practices and material choices are to reduce exterior maintenance and to avoid termite and moisture damage.

As a participant in the Florida Power & Light Company Watt-Wise Program, RDK Development Corporation built the homes with tinted glass, R-19 ceiling insulation, R-11 wall insulation, soffit screen attic vents, and

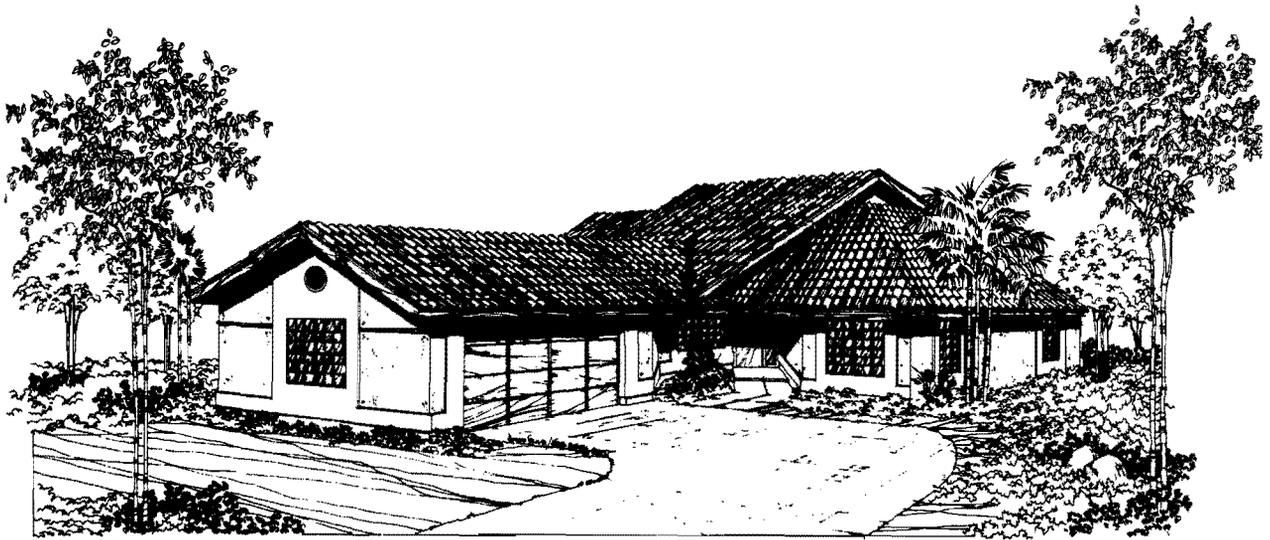
high-efficiency air conditioners, ranging from 8.5 to 8.9 Seasonal Energy Efficiency Rating (SEER).

The four single-family detached models range in size from 1,410 to 1,710 square feet of air conditioned living space and in price from \$99,900 to \$109,900. All models are one-story designs with three bedrooms, two baths, and a two-car garage. Lot sizes range from 6,500 to 11,671 square feet.

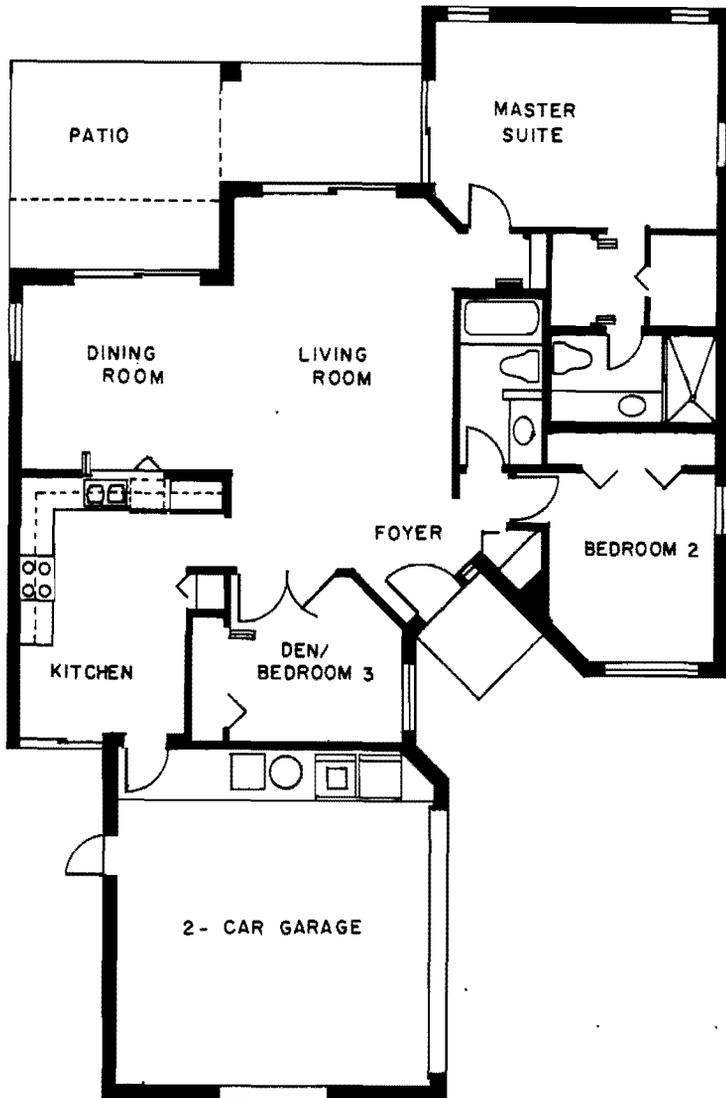
The semi-detached units have 1,385 square feet in each unit. Both models are one-story units with three bedrooms, two baths, and a two-car garage and are priced at \$92,900.

The only difference between the two units is that one garage is 60 square feet larger than the other. The lots containing these units range from 4,933 to 7,606 square feet.

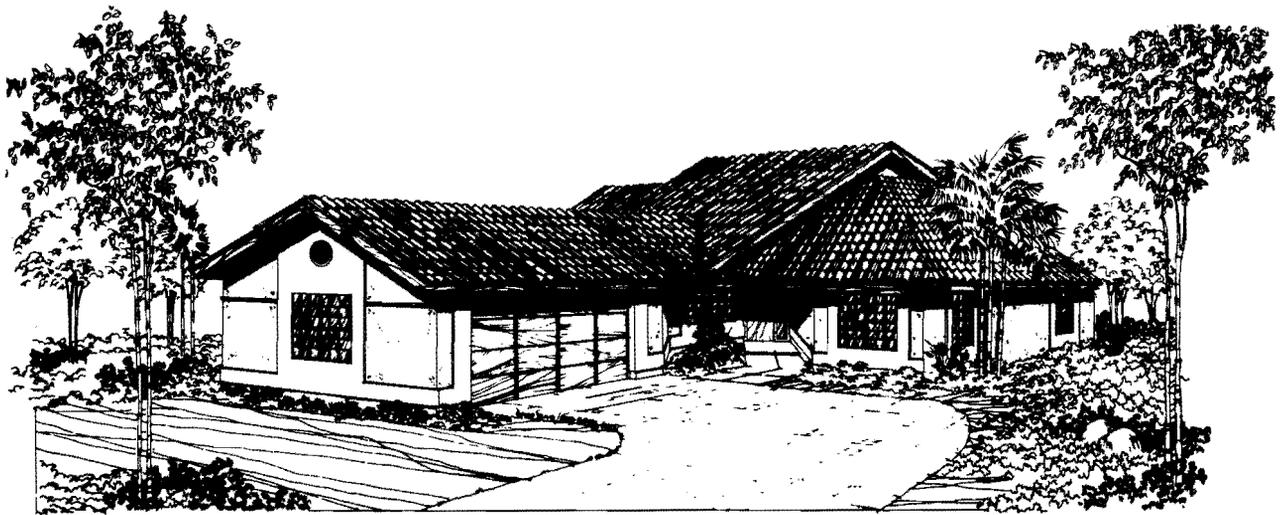
The two-story townhouse units feature three bedrooms, two full baths and one half-bath, and a one-car garage. One of the units contains 1,388 square feet of air conditioned living space priced at \$88,400, and the other contains 1,368 square feet and is \$86,900. The townhouses are built in rows of four units with the fee-simple lots ranging from 3,475 to 3,588 square feet.



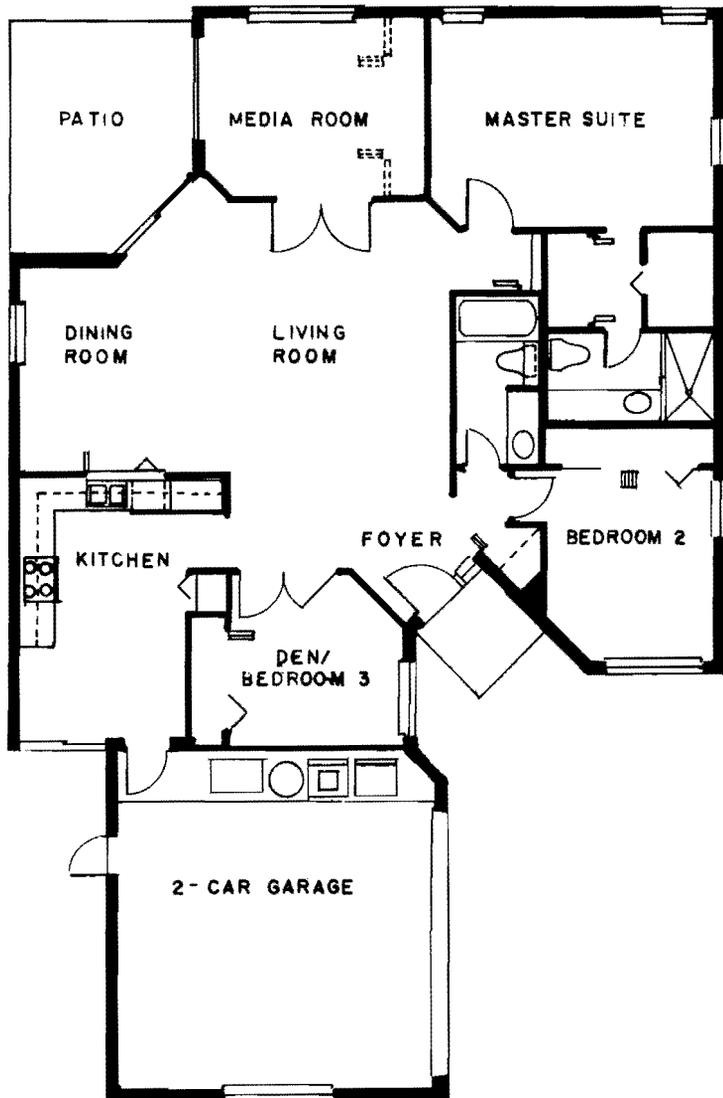
Pointe A Model - 3-bedroom and 2-bath single-family detached home with 2-car garage and covered patio



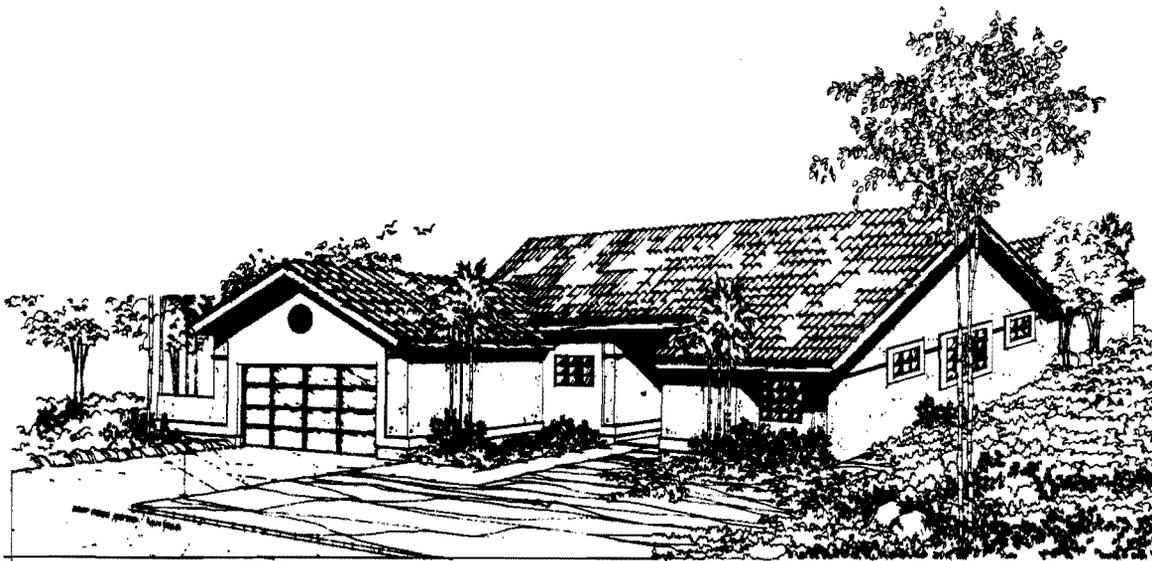
Living Area	1,420 sq. ft.
Garage	418
Covered Entry	48
Patio	234
(Covered 134)	
(Open 100)	
Total Sq. Ft.	2,120



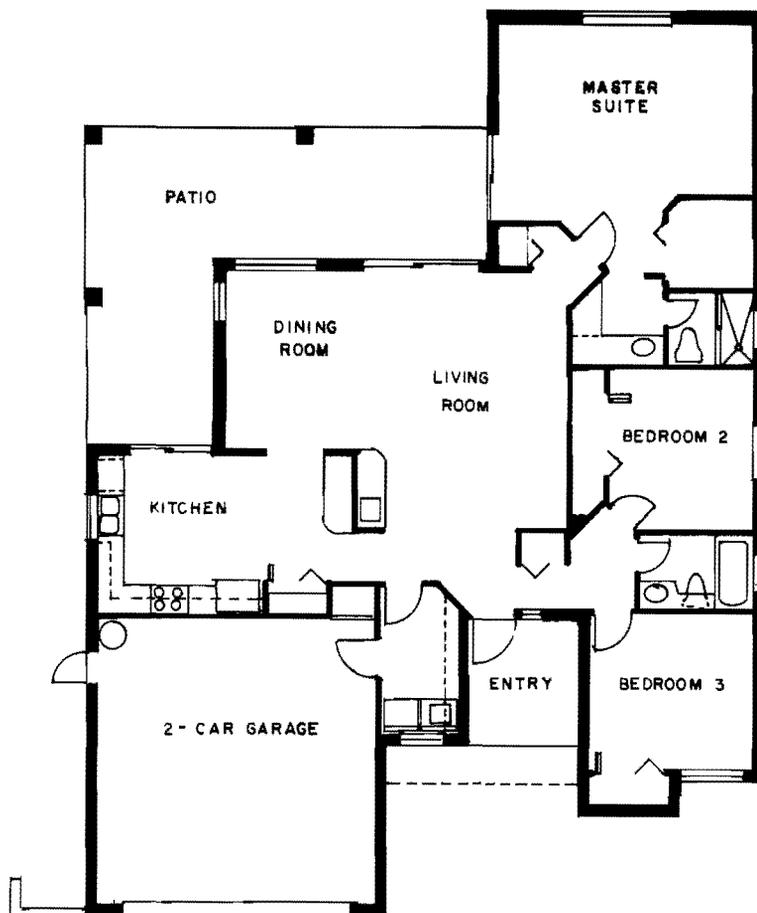
Pointe A1 Model - 3-bedroom and 2-bath single-family detached home with 2-car garage and media room



Living Area	1,590 sq. ft.
Garage	420
Patio	148
Covered Entry	36
Total Sq. Ft.	2,194



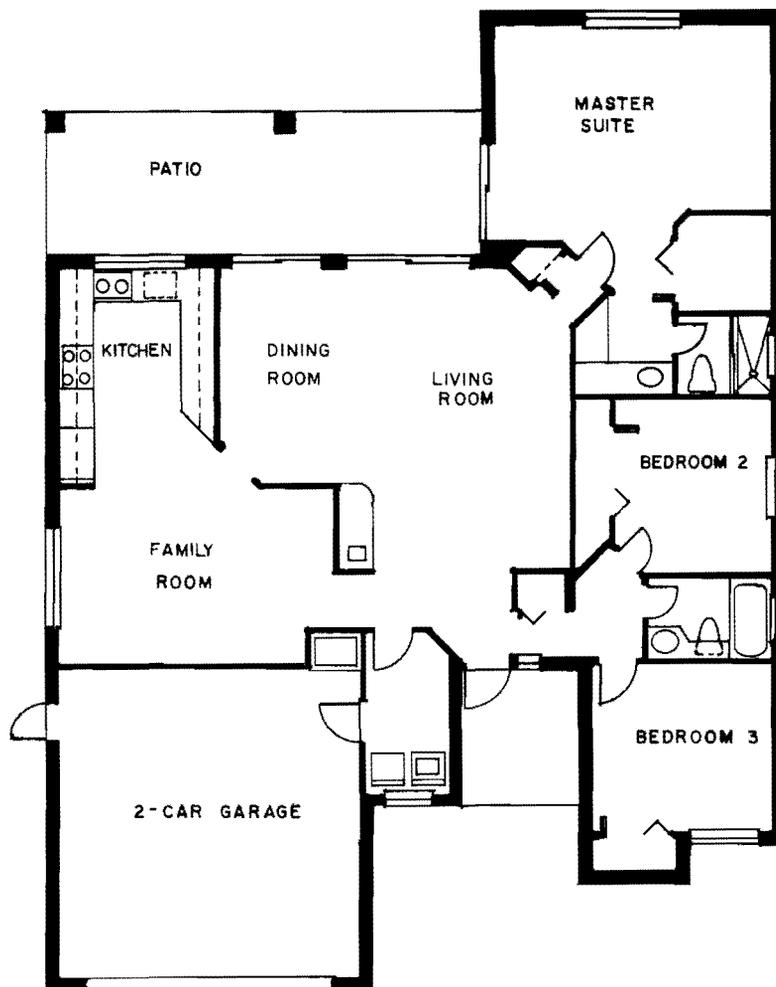
Pointe B Model - 3-bedroom and 2-bath single-family detached home with 2-car garage and covered patio



Living Area	1,498 sq. ft.
Garage	420
Laundry Room	45
Covered Entry	65
Covered Patio	364
Total Sq. Ft.	2,392



Pointe B1 Model - 3-bedroom and 2-bath single-family detached home with 2-car garage and covered patio

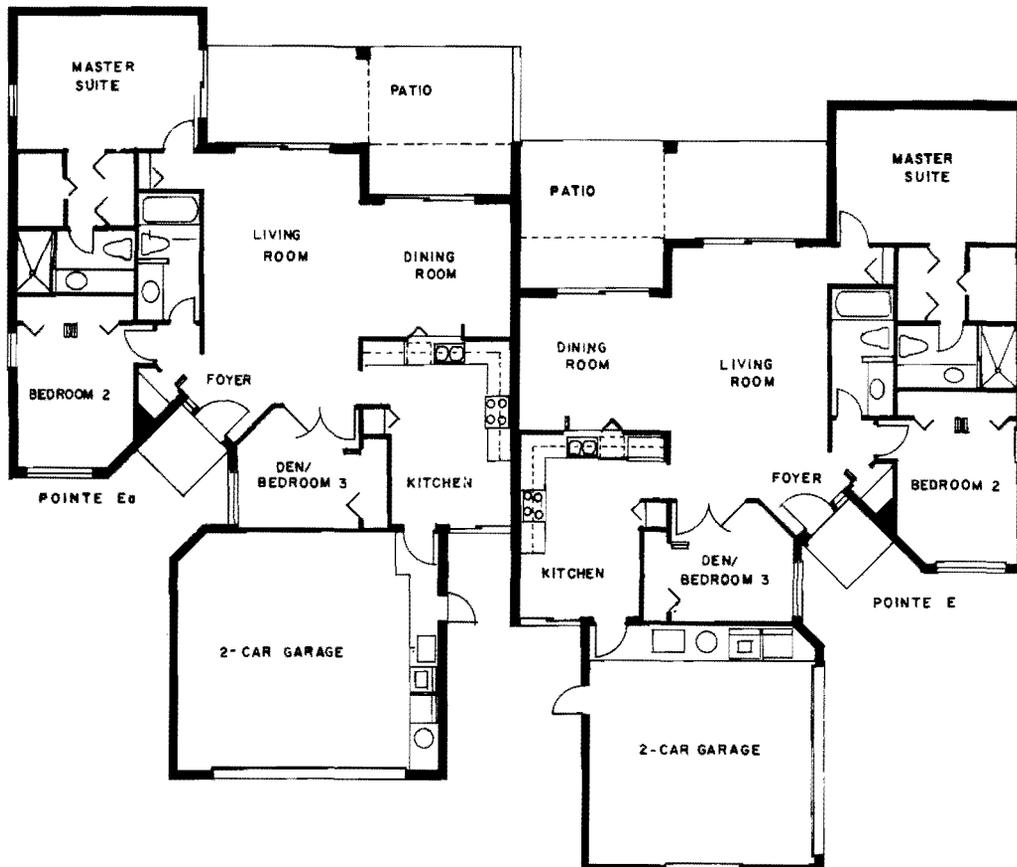


Living Area	1,710 sq. ft.
Garage	430
Covered Patio	278
Covered Entry	65
Total Sq. Ft.	2,483



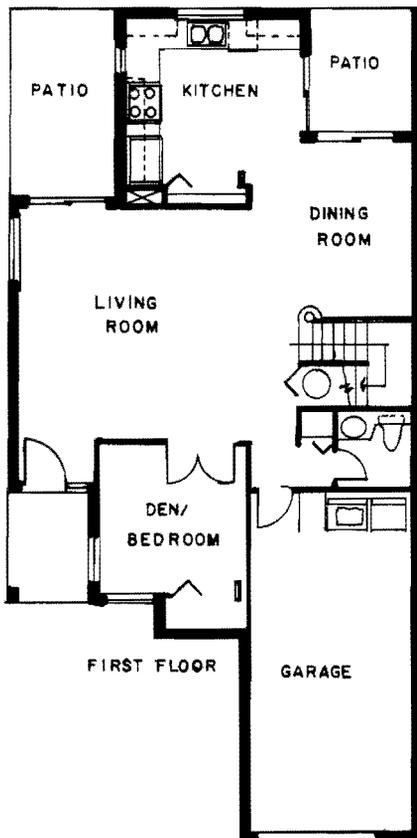
Pointe E and Ea Models - 3-bedroom and 2-bath semi-detached home with 2-car garage and covered patio

Living Area	1,385 sq. ft.	Living Area	1,385 sq. ft.
Garage	418	Garage	478
Covered Entry	48	Covered Entry	48
Patio	249	Patio	249
(Covered Areas 155)		(Covered Areas 155)	
(Open Area 94)		(Open Areas 94)	
Total Sq. Ft.	2,100	Total Sq. Ft.	2,160

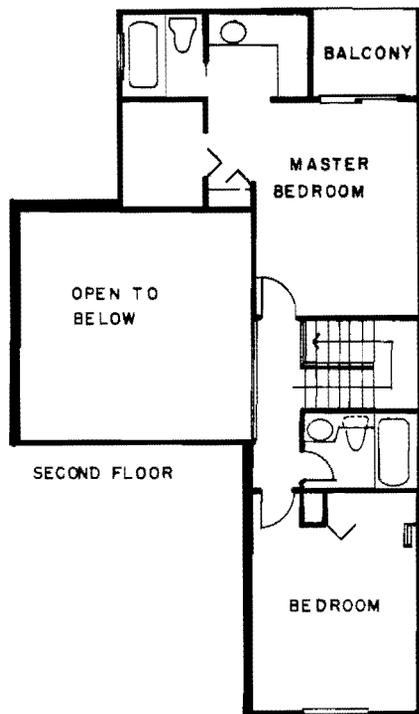




Pointe C Model - 3-bedroom and 2½-bath townhome with 1-car garage, balcony, and patio

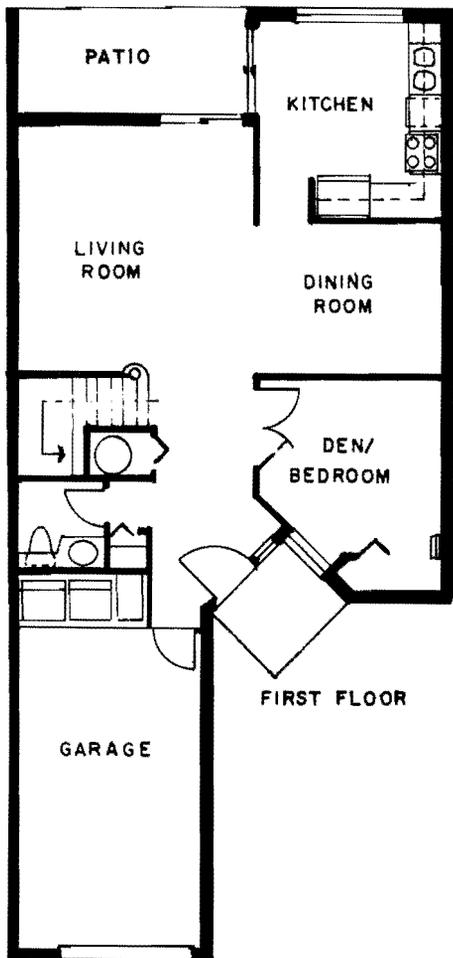


Living Area	1,388 sq. ft.
Garage	285
Covered Patio	60
Balcony	42
Total	1,775 Sq. Ft.

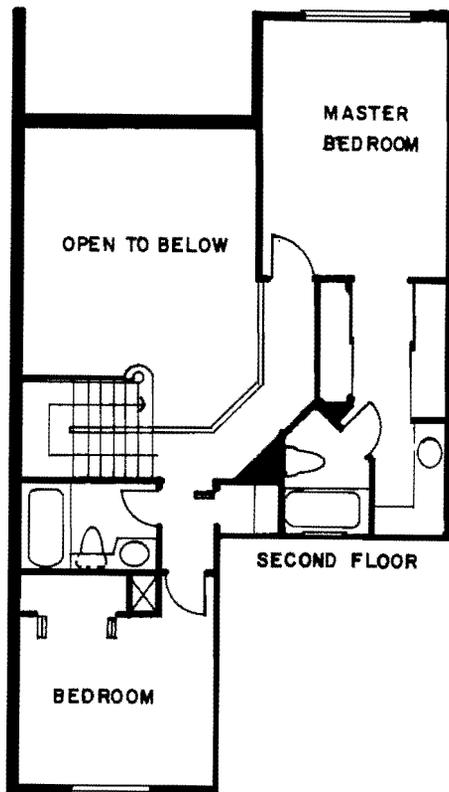




Pointe D Model - 3-bedroom and 2½-bath townhome with one-car garage and patio



Living Area	1,368 sq. ft.
Garage	265
Patio	84
Total	1,717 Sq. Ft.



Project History

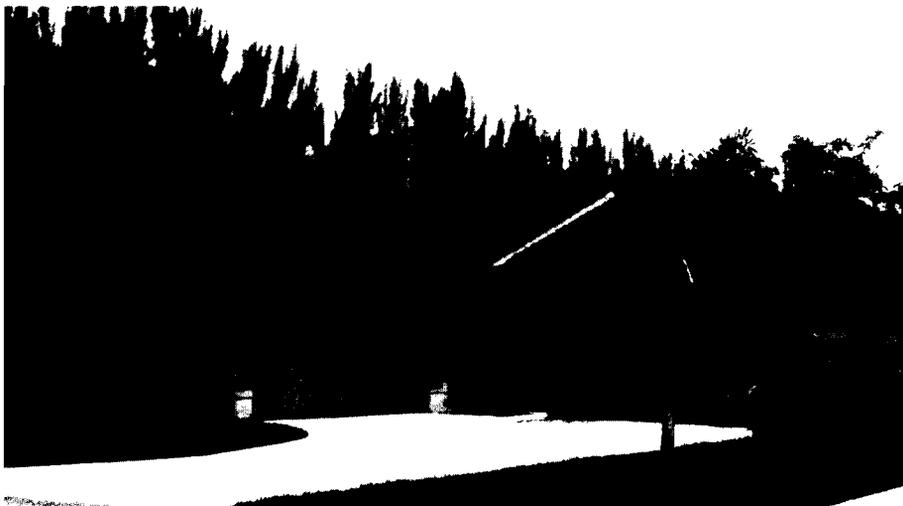
In January 1982 the U.S. Department of Housing and Urban Development (HUD) announced that Broward County and the City of Coral Springs, Florida, and Coral Ridge Properties, Inc. were participants in the Affordable Housing Demonstration Program. In February 1982 Werner Buntmeyer designated Victor E. Jarvis, then Executive Assistant for Development, as Project Manager of the Affordable Housing Demonstration for Coral Ridge Properties. Also during this period, Parcel J in the Maplewood Section of Coral Springs was selected as the site for the development, and preliminary site planning began. By the end of March, Coral Ridge Properties had completed its preliminary planning efforts for the western 11.97 acres of Parcel J. Drafts of deed restrictions and architectural control standards had been prepared, and preliminary estimates of schedule and development costs were drafted. A schedule of the project's history appears in Appendix II.

An initial meeting of the Coral Ridge Properties Project Team with Coral Springs Mayor O.B. Geiger, City

Manager Dodd A. Southern, and other administrative staff took place on March 30, 1982. The purpose of the meeting was to review the goals of the Affordable Housing Demonstration and to present the preliminary development plans. Mayor Geiger directed the city staff to work with Coral Ridge Properties to investigate areas for reducing housing cost and named Robert G. David, Director of Economic Development, as project coordinator for the city.

The city and Coral Ridge Properties project teams met two days later to explore alternative drainage concepts, setback requirements, rights-of-way, and paving widths as the areas in which cost savings appeared possible. Reduction of processing time was discussed and resulted in the city staff's agreeing to develop a proposed schedule to reduce the total time involved.

Coral Ridge Properties then began discussions with the South Florida Water Management District. These discussions ended with no changes negotiated in the requirements for the drainage system.



Single-family detached unit

During April 1982, the Broward county administrator designated Assistant County Administrator Joel M. Volinski, as the primary county government liaison for the demonstration. Buntmeyer and his staff met with Volinski and other members of the Broward County staff to discuss establishing a county task force to identify and encourage specific improvements in processing to reduce housing costs. Following this meeting, Raymond L. Popkin, Assistant Director of Housing for Broward County, provided Coral Ridge Properties with a copy of a draft residential demonstration district ordinance. HUD had supplied the draft to illustrate how the demonstration could receive special treatment without necessarily setting a precedent for future developments.

By the end of April, the city developed a schedule reducing the time for zoning, platting, and permitting from an average of 154 days to 42 days.

In May Coral Ridge Properties completed the site development plan and worked with a local engineering firm to define paving, drainage, sewer, and water installations. Discussions with Florida Power and Light Company and Southern Bell regarding easement requirements also took place. During this time Coral Ridge Properties met several times with the county development review committee to review and discuss the plat.

Coral Ridge Properties held meetings during June with the original architectural firm chosen to design the homes. The objective of these meetings was to ensure understanding of the architectural control standards and design compatibility among the unit types.

During May and throughout June 1982, Coral Ridge Properties worked closely

with the city project team to draft a resolution including specific zoning regulation exceptions for the demonstration site for presentation to the city commission.

The resolution proposed reduction of lot widths from 70 to 65 feet for single-family detached units. In addition, it reduced lot areas from 7,000 to 6,500 square feet and front setbacks from 25 feet to 20 feet. Also reduced was the finished floor area, from 1,350 to 1,000 square feet.

Front setback for the semi-detached houses was reduced from 25 to 15 feet, and side setback was reduced from 10 to 7.5 feet. Setback requirements were reduced for privacy walls, patio/deck areas, and swimming pools. The maximum height of privacy walls was raised to 6.5 feet.

Minimum lot width and minimum lot area limitations for the townhouses were eliminated, front setback was reduced from 25 to 15 feet for one-story buildings and from 25 to 20 feet for two-story buildings, and side setback was reduced from 10 to 7.5 feet. The limitations on the maximum finished floor area in two-bedroom units of 800 square feet and one-bedroom units of 650 square feet were both increased to 1,000 square feet.

The resolution was submitted to the city commission on June 15, 1982, but action was delayed because the commission wanted more time to review the material. On July 6, 1982, the city commission unanimously approved the resolution.

Also during May 1982, Coral Ridge Properties developed a draft ordinance for Broward County's official endorsement of the demonstration based on the sample ordinance provided by Popkin. After review by the staff of the Office of

Planning, General Counsel, and Community Development Division, the county indicated several concerns. The first concern was the project's worthiness of support from a public body. The estimated \$90,000 selling price of the homes, although lower than similar units built under existing regulations, was affordable to only 5 percent of the county population. The second concern of the reviewers was the general tone of the ordinance, which raised questions relating to jurisdictional authority. Finally, the county reviewers took exception to the proposal that the county expedite its plat review function and rely more on review by the city. The county suggested that a concurrent review be conducted by the city and the county to enable the county to fast track its review to correspond as closely as possible to the city review schedule. Finally, Volinski recommended that Coral Ridge Properties request a hearing before the county commission to determine if the county was interested in participating in the demonstration.

As the city resolution and the county ordinance were drafted and reviewed, Coral Ridge Properties completed a final plat for the project. On June 25, 1982, the plat was submitted to the city for review. Three days later, the plat was submitted to Broward County for traffic way review to determine that adequate rights-of-way were being provided for county roads adjacent to the site. County approval of the traffic way was received by Coral Ridge Properties on July 22, 1982.

During July 1982 Coral Ridge Properties revised the draft county ordinance and resubmitted it to Volinski. Coral Ridge Properties then met in August with county staff to determine how best to expedite the processing and how to present the project at the hearing before the county commission.



Landscaped entry to single-family detached unit

The Broward County staff submitted to the commission their assessment of the project. This material noted that the site already had an approved land use plan designation for medium density--10-20 dwelling units per acre--and was zoned and platted to accommodate 240 multifamily low-rise residential units. As such, Coral Ridge Properties had the option of proceeding with the originally planned development without further government approvals or fees other than those for building permits. The assessment noted that Coral Ridge Properties had voluntarily replatted the land for a maximum of 89 units and believed that this lower density and the project's status as an Affordable Housing Demonstration Project negated the need for impact fees, off-site improvements, and other expenses related to the replatting process.



Rear yard of single-family detached unit showing covered patio

The staff report cited the program's benefits to the county and noted that city approval of the plat would determine its full compliance with the city's county-certified land use plan and land development regulations. City approval would also determine the availability and adequacy of such services as water, sewer, fire protection, and transportation. Noting that there would be over a 60 percent reduction in the number of dwelling units from the otherwise permitted uses and densities, the staff report concluded by requesting the commission's formal approval.

On September 7, 1982, the hearing request to discuss county participation in the demonstration came before the Broward County Board of County Commissioners. Jarvis presented a general description of the project and outlined its objectives as follows: (1) to coordinate efforts between Coral Springs and Broward County to reduce the cost of high-quality housing, (2) to produce a small, successful mixed subdivision, and (3) to document the efforts to reduce housing costs. Jarvis described the cost-reducing steps as street width reduction, swale drainage rather than

on-site retention, right-of-way reduction, fee-simple townhouse lots rather than condominium, lot size reduction, reduced approval times for zoning, platting, and permitting, and elimination of impact fees.

The county's general counsel pointed out that Coral Ridge Properties was requesting the commissioners to limit their review to the technical requirements of the Florida Statutes and the County's Land Development Code. All other reviews would then be in accordance with the Coral Springs Land Use Plan, which had been certified for conformance with the county's Land Use Plan. The general counsel noted that the county had recently been involved in litigation over this issue with the Broward County League of Cities and that the procedure was not provided for in the existing ordinance.

The board took no action on the county staff request at this meeting.

Also on September 7, the City Commission of Coral Springs approved the final plat submitted by Coral Ridge Properties. The hearing, on the plat, however, had not been advertised. After advertisements

appeared in the appropriate newspapers, the plat was reapproved on November 2, 1982.

Between September 1982 and January 1983, the county staff rejected Coral Ridge Properties' attempt to minimize regulatory costs and to expedite approvals since the county commission had not supported special handling for the project. So, the company submitted a final plat to Broward County in mid-November 1982 for review.

While this review was in progress, Coral Ridge Properties discussed with the County Traffic Engineering Division the Road Agreement made between themselves and the county, which specified required road improvements. These improvements involved roads in the subdivision and county roads within a five-mile radius. The cost of off-site improvements was negotiated between Coral Ridge Properties and the county staff and was credited against the project road impact fees.

The final Road Agreement was submitted to the County Board in January 1983. At its February 1, 1983, meeting the Board discussed the final plat and Road Agreements.

The first issue relating to the Road Agreement dealt with the method used to determine road impact fees. At the time the plat was first submitted, these fees were estimated at \$37,100 using the Broward Impact Zoning System (BIZS); Coral Ridge Properties, however, had used the newer Traffic Review Impact Planning System (TRIPS), resulting in a lower estimate of \$9,691. The county counsel pointed out that the county ordinance required the plat to be formally withdrawn and resubmitted to permit the legal use of the TRIPS system. The resubmittal added two more weeks to the time for final permit approval.



Right turn lane along West Atlantic Boulevard at NW 104th Way

The Coral Ridge Properties Road Agreement proposed the installation of sidewalks, street markings, and street signs within the subdivision plus the installation of guardrail at a canal crossing approximately two miles from the site. The cost of the guardrail construction was credited against the road impact fees. The agreement also specified that a performance and payment bond be established and maintained by Coral Ridge Properties until the work was completed, accepted by Broward County, and a release letter obtained. The bond was to continue through mid-1986 as a result of other county road improvements that prevented guardrail construction until that time.

Coral Ridge Properties, however, objected to a county staff recommendation that a right-turn lane be installed in the westbound lane of West Atlantic Boulevard at NW 104th Way to accommodate traffic turning

into the subdivision. They argued that the volume of traffic turning into the subdivision would be too small to warrant the right-turn lane. The county staff also recommended a 100-foot vehicular non-access line on both sides of NW 104th Way at its intersection with West Atlantic Boulevard to preclude the entry of vehicles onto the street from drive ways, parking lots, or other cross streets.

The final issue raised by the county staff concerned the placing of a note on the face of the plat to restrict development in the subdivision to 89 units. Coral Ridge Properties argued that this was unnecessary, since the city had adopted a zoning resolution with that limit. They pointed out that the Land Development Code stated that zoning and platting place acceptable limitations on development and that there was no specific requirement for a note on the plat. The Broward County Office of Planning, however, argued that the general counsel's office had suggested this recommendation because of the possibility of a future zoning change or land use amendment allowing more construction.

Because these issues were outstanding, the Board of Commissioners deferred action until March 15, 1983, and directed county staff and Coral Ridge Properties to meet to resolve them.

On March 29, 1983, the county commissioners approved the plat subject to staff recommendations on the Road Agreement to be established with Coral Ridge Properties and the restriction of the development to 89 units. Coral Ridge Properties and county staff resolved the outstanding issues, and the approved plat was officially recorded on July 13, 1983.

In February 1983, with approval imminent, Coral Ridge Properties initiated site preparation. Sewer and water installation began in mid-April and was completed on August 19. Grading and paving began in August. The grading was completed by September, and the paving, marking, and sign installation were completed in October. The following two weeks were devoted to cleaning up the site in preparation of releasing the lots for sale to builders in November 1983.

On May 11, 1984, Coral Ridge Properties petitioned the city for a plat waiver to establish 24 individual fee-simple townhouse lots to avoid the cost of establishing a condominium association. On June 14 the company also petitioned the city to approve abandonment of a portion of the vehicular non-access line on NW 104th Way that had been incorporated in the Road Agreement and shown on the plat as a county requirement. Abandoning the vehicular non-access line was requested to allow access to parking facilities between the rows of townhouse units nearest the subdivision entrance. This parking facility layout had not been shown on the final plat previously submitted. In July the city commission approved the petition for the waiver of plat regulations to establish fee-simple townhouse lots. These were the first such fee-simple townhouse lots in the city. On August 21, 1984, the city commission amended the original resolution approving the final plat by vacating 26 feet of the vehicular non-access line along the west line of the townhouse lots on NW 104th Way at the intersection with West Atlantic Boulevard. After reviewing the final parking facility layout for the townhouses, the Broward County Board of County Commissioners on

October 18, 1984, also approved the vehicular non-access line abandonment.

During the lengthy period required for obtaining final plat approval, the originally selected architect and team of three builders lost interest and dropped out of the project. Coral Ridge Properties then selected RDK Development Corporation as the builder; RDK Development in turn retained Angles & Esteban, a Miami-based architectural firm, to

develop plans for the three types of housing units to be used in the development.

Construction of two single-family detached units, one semi-detached unit, and another single-family detached unit to be used as the sales office began in October 1984 and was completed in June 1985. The final site plan showed 24 single-family detached units, 26 semi-detached units, and 24 townhouse units on the 11.97 acre site.



Rear yard of semi-detached units with privacy wall

Cost-Reducing Methods

The major goal of the Affordable Housing Demonstration is to identify ways the city, builder, planner, engineer, and architect can work together to produce high quality homes at affordable prices. This goal is pursued by cutting costs in three areas: administrative and processing, site development, and house construction. The following discusses modifications in regulations and standards that resulted in reduced costs at Village Pointe.

Administrative and Processing Changes

Parcel J had been approved in the 1970's as a multifamily low-rise residential area with 240 units at a density of 10-20 units per acre. Coral Ridge Properties had the option of simply applying to the city for building permits to begin construction at this density, circumventing all city and county subdivision and plat processing and approvals and avoiding payment of impact fees.

To help develop a more streamlined approach for platting land within Broward County, Coral Ridge Properties, however, chose to replat the western 11.97 acres of Parcel J to create a community of mixed housing types, including single-family detached units, semi-detached units, and townhouse units. The developer hoped that both the city and the county would try new concepts and methods to save money because of the project's status as an Affordable Housing Demonstration.

The plan called for expeditious processing for zoning, platting, and permitting at both the city and county levels. To accomplish this, Coral Ridge Properties planned to work with city officials to develop

an efficient schedule for review and approval of the replat and any zoning changes required. Once the city approvals were received, Coral Ridge Properties expected the county to simply review and accept the city processing.

The developer also expected to avoid impact fees because the recorded plat for Parcel J could have been built without these impact fees and because the replat planned a subdivision with a lesser number of units than permitted. The county, however, imposed the impact fees.

Although the processing time for city approvals was reduced to 120 days from 154 days, the county processing took 370 days versus the usual 168 days. Also, no procedures were established to permit the development of the replatted subdivision without the impact fees.

Site Development Changes

The builder effected land development cost-savings in the following areas: street paving widths were reduced from 24 to 20 feet; swale drainage was used to retain storm water runoff on site rather than by the construction of a one-acre retention lake; street right-of-way was reduced from 50 to 35 feet; and minimum allowable lot size for single-family detached units was reduced from 7,000 to 6,500 square feet.

The city agreed to other changes within the building lots. In the single-family detached unit lots, the front setback limitation was reduced from 25 to 20 feet, and the minimum finished floor area was reduced from 1,350 to 1,100 square feet. The architect, in fact, did not take advantage of the reduction in minimum finished floor area for marketing

reasons. In the semi-detached lots, front setback was reduced from 25 to 15 feet, and side setback was reduced from 10 to 7.5 feet. The city also allowed reduced requirements for accessory structures for the semi-detached units. Privacy wall setback requirements from the front of the lot were reduced from 25 to 10 feet, and setback requirements from side and rear lot lines were eliminated. Furthermore, the privacy wall height limitations ranging from 4 to 6 feet were increased to 6.5 feet. The setback requirements for patio/deck areas were reduced from 25 to 10 feet for the front and from 5 to 3 feet for the side and rear. The setback requirements for swimming pools were reduced from 25 to 15 feet for the front and from 7.5 to 3 feet for the side and rear. In the townhouse unit lots, the front setback requirement for one-story units was reduced from 25 to 15 feet and from 25 to 20 feet for two-story units. The end unit side setback requirement for both one- and two-story units was reduced from 10 to 7.5 feet.

In the townhouse units, the city approved the developer's proposal for

fee-simple ownership--the first case of fee-simple townhouse lots in the city. It saved money by eliminating the time and legal fees involved in establishing a condominium association.

House Construction

RDK Development Corporation routinely employs optimum value engineered construction practices. They used polyvinylchloride drain, waste, and vent piping and polybutylene supply piping where piping was unexposed. They installed 150 amp electrical service and utilized nonmetallic sheathed cable and plastic utility boxes.

Construction costs were also reduced in the kitchen and bath. In the kitchen, valance lighting installed over the cabinets was less costly than installing a ceiling light fixture. In the bathrooms, medicine cabinets were replaced by an upgraded vanity with drawer space.

Acknowledgements

A significant portion of the details presented in this document were made available through the efforts of Mr. Victor E. Jarvis, assistant vice president for development, Coral Ridge Properties, Inc.

Project History Schedule

Jan. 1982	HUD announces Affordable Housing Demonstration in Coral Springs, Broward County, Florida	Mar. 1984	Architectural designs completed
Jul. 1982	Final plat submitted to City of Coral Springs	May 1984	Petition for fee-simple townhouse lots submitted to City of Coral Springs
Sep. 1982	County Commission takes no formal action after hearing discussion of the Affordable Housing Demonstration	May 1984	Builder purchases developed site
Sep. 1982	City approves the final plat	June 1984	Petition to vacate vehicular non-access line submitted to City of Coral Springs
Nov. 1982	Final plat submitted to Broward County	July 1984	City approves fee simple townhouse lots
Mar. 1983	County approves the final plat	Aug. 1984	City approves vacating vehicular non-access line
Apr. 1983	Sewer & water installation completed	Oct. 1984	County approves of vacating vehicular non-access line
July 1983	County records final plat	June 1985	Models completed and opened to public
Oct. 1983	Paving completed		

The Affordable Housing
Demonstration
Case Study 4

Oklahoma City, Oklahoma

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The Affordable Housing Demonstration project in Oklahoma City, Oklahoma, is "Woodland Hills", located on a 30-acre site in the northeast section not far from the city boundary. The project is being developed by the Holland Land Company, which is commercially developing the adjoining 30 acres fronting on Interstate 35.

Mayor Andy Coates and Hal Bassett, Executive Director of the Manufactured Housing Association of Oklahoma, proposed the Holland project to the Department of Housing and Urban Development (HUD) as a demonstration project using manufactured housing. HUD designated Woodland Hills as an official Affordable Housing Demonstration project in October 1983.

Woodland Hills is a manufactured housing subdivision of 207 units designed at a gross density of 6.9 units per acre or a net density of 8.2 units per acre. The demonstration phase, Phase I, includes 117 single-family detached homes. Phase II will include 50 duplex units and 40 four-plex units.

The term manufactured homes refers to housing units produced in accordance

with Federal Manufactured Housing Construction and Safety Standards. This is a single, national standard for manufactured housing (formerly called mobile homes) administered by HUD. The homes are built on steel I-beam chassis with the axles, wheels, and hitch mechanisms removable once the homes are placed on foundations.

The Woodland Hills homes are manufactured by Chief Industries of Aurora, Nebraska; Marlette Homes, Inc. of Great Bend, Kansas; Cameo Energy Homes, Inc. of Big Springs, Texas; and Fuqua of Austin, Texas. Models range in size from 865 square feet to 1,530 square feet and sell for \$39,900 to \$57,500.

An average of \$5,477 per unit was saved by the steps taken by Holland and Glen R. Turner and Associates, Inc., land planner, with the cooperation of Oklahoma City officials and staff. The greatest savings were achieved through increased density, reduced rights-of-way, narrower streets with reduced paving thickness, and use of roll curbs.

Project Description

The Community - Oklahoma City, Oklahoma

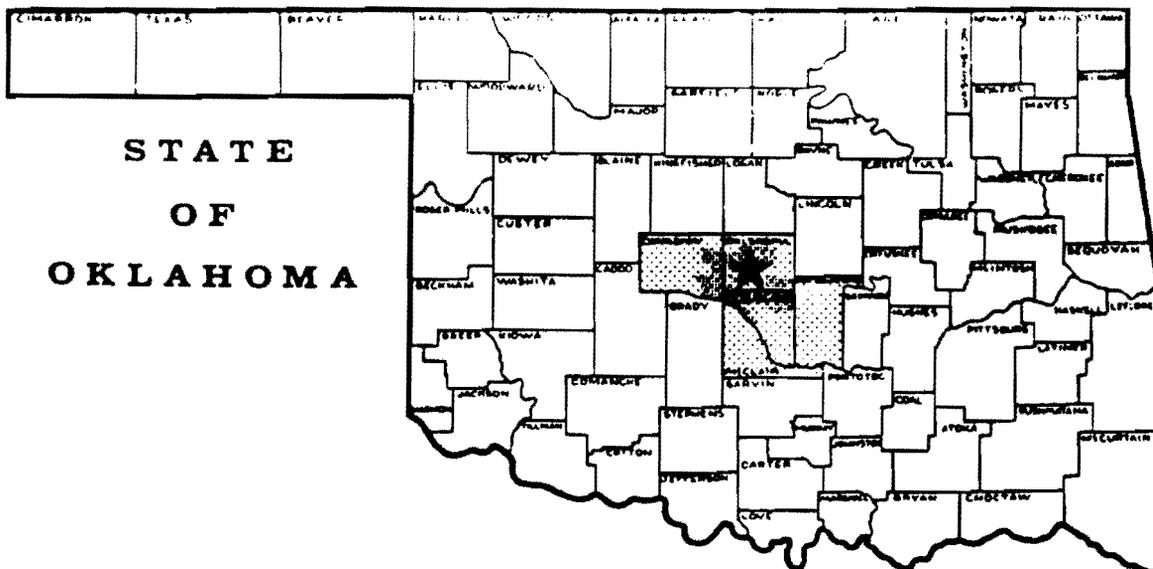
Oklahoma City, capital of Oklahoma, is located in the middle of the state, near the geographic center of the continental United States. The city dates back to April 22, 1889, when presidential proclamation opened the central portion of what is now Oklahoma to settlement. Thousands of people staked claims during the Oklahoma Land Run, changing the site from virgin prairie in the afternoon to a town of 10,000 by night. In 1910, three years after Oklahoma became a state, Oklahoma City was declared the state capital. Oil was discovered beneath a section of the city in 1928, leading to development of what was then the largest oil strike ever made.

Oklahoma City is one of the nation's largest cities in land area, covering 621 square miles. The Oklahoma City Metropolitan Statistical Area (MSA) is 4,242 square miles. Over 403,200 people lived in the corporate city and 834,000 in the MSA according to

the 1980 Census. Projected 1985 population of the corporate area is 421,300, 901,700 in the MSA.

Situated in the sunbelt at 1,291 feet above sea level, Oklahoma City has temperatures averaging in the low 80's in July and the mid 30's in January. The city annually receives an average of 3,000 hours of sunshine, 31.6 inches of rainfall, and 9 inches of snowfall.

Oklahoma City has a diverse economic base, with jobs in agriculture, energy, aviation, government, manufacturing, and industry. Major employers include Tinker Air Force Base, the Mike Monroney Aeronautical Center, AT&T Network Systems, and General Motors. Oklahoma City is one of the nation's largest processing and distribution centers for a variety of farm products and has the world's largest stocker and feeder cattle market. Many large oil and energy-related companies have headquarters or branch offices in the city.





CITY of OKLAHOMA CITY!

Presently, the economy of Oklahoma City, like other cities in the area, is on a downswing. Unemployment was 6.5 percent in February 1985, up 1.7 percent from one year earlier. Sagging oil, gas, and grain prices, a record number of bankruptcies, and lost jobs have clouded economic prospects for 1985. The state is struggling to diversify and catch up with the national recovery, but growth for 1985 is limited, according to W. J. Bowman, Research Chief for the Oklahoma Employment Security Commission.

Oklahoma City has a city manager-council form of government with eight councilmen and a mayor elected for staggered four-year terms. The city manager is appointed. Mayor Andy Coates served during the Affordable Housing Demonstration.

Median household income for 1981 was \$22,997, according to Oklahoma City Sales and Marketing Management, Inc. The average price of homes in Oklahoma City was \$72,416 in 1983 and \$74,281 in 1984, according to the Oklahoma City Metropolitan Board of Realtors. Median price for resale homes was \$63,600 in 1984. In 1983, 9,216 homes were sold; and in 1984, 7,044 homes were sold. The Advance Mortgage Corporation reported that the housing market in metropolitan Oklahoma City slowed considerably in late 1984, after record production in

1982, 1983, and the first quarter of 1984. Single-family residential building permits in the greater Oklahoma City area were down 64.5 percent in December 1984 compared to December 1983. For the 12-month period, total permits were down 30 percent. Construction activity in February 1985 was down 8.9 percent from the year before.

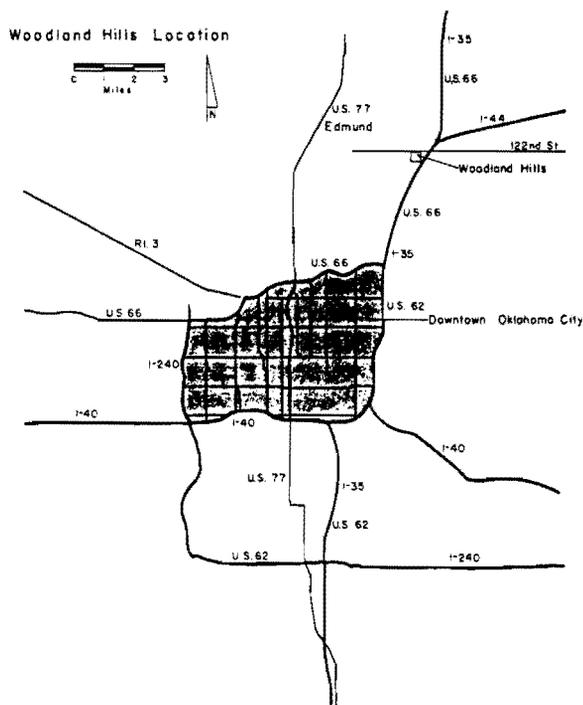
The Builder - Holland Land Company

Jack Holland founded the Holland Land Company, a land development business, in 1964 and has developed and built projects in Tulsa, Oklahoma City, Muskogee, and Lawton, Oklahoma. Included in these projects are residential subdivisions, service stations, motels, apartment complexes, and strip shopping centers.

The Holland Land Company, a family-based company, includes Jack Holland, Chairman of the Board, and John Holland, President. Land planning, civil engineering, site development, design, and construction are subcontracted.

The Holland Land Company retained Glen R. Turner and Associates, Inc. for site planning and development of the Affordable Housing Demonstration project. Turner Associates is an urban land development consulting firm providing services to public and private clients. Established in 1970, they have consulted in over 50 cities and towns on zoning, master planning, and community development. Also, Turner has helped private developers to plan commercial centers, multi-family complexes, residential subdivisions, industrial parks, mixed-use developments, redevelopment projects, and Planned Unit Developments (PUD).

The E. D. Hill Surveying and Engineering Company provided the engineering services for the project.

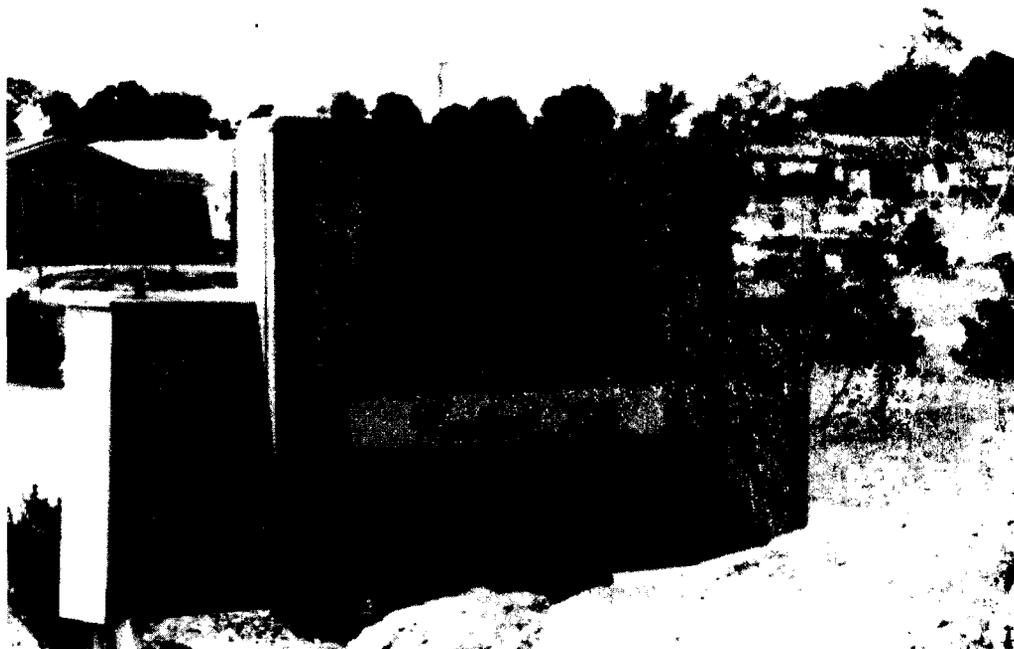


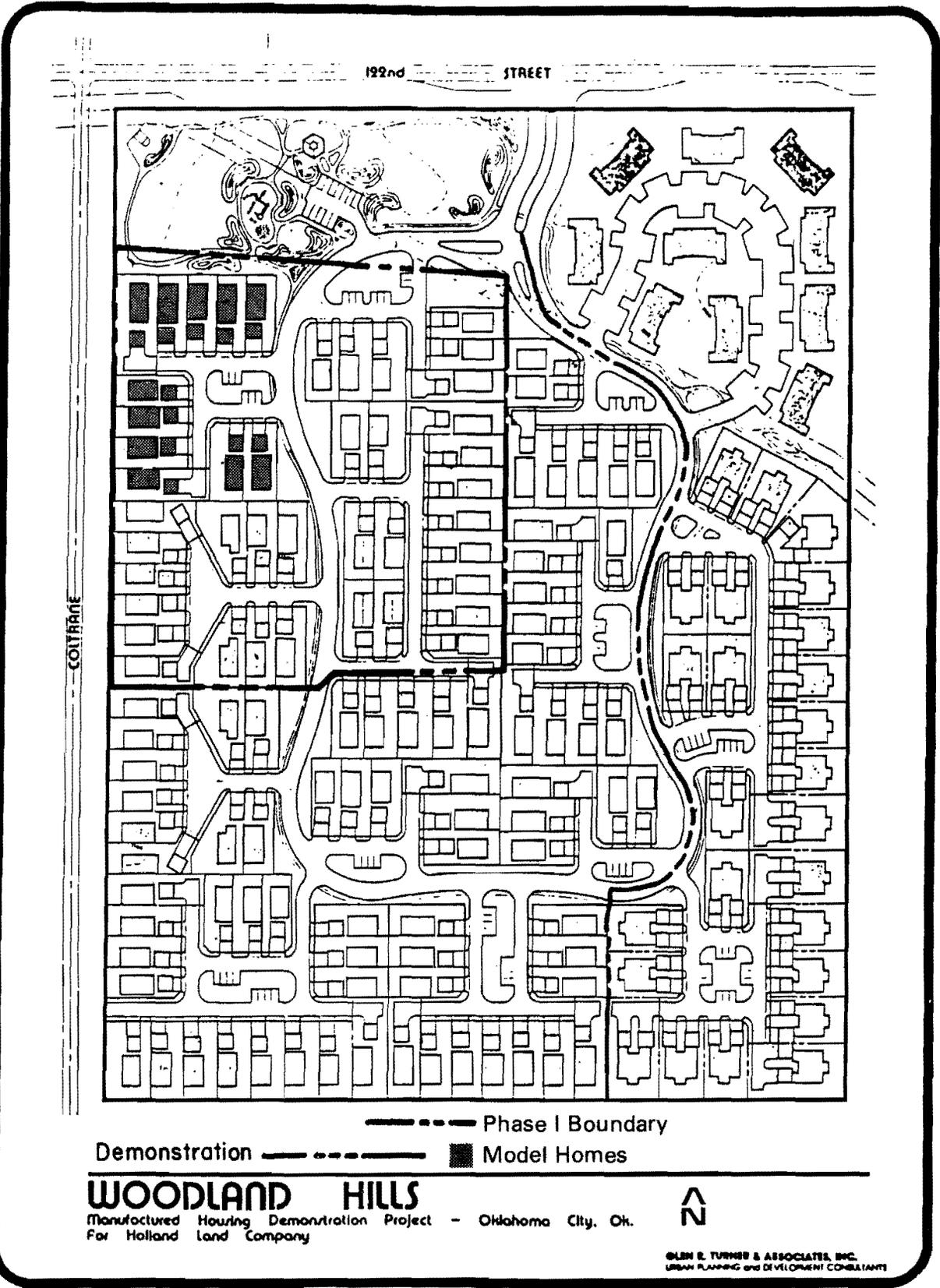
fronting Interstate 35 include a strip shopping center and a 3-1/2-acre truck stop. Sites have been sold to Love Truck Stop, McDonalds, Best Western Motel, Waffle House Restaurant, and a local motel chain. The back 30 acres is the Affordable Housing Demonstration site. Other nearby areas include a recreational vehicle campsite, small farms, and homes in excess of \$100,000 on two- and three-acre lots.

Woodland Hills is a manufactured housing subdivision of 207 units built at a gross density of 6.9 units per acre or a net density of 8.2 units per acre. The site is being developed in two phases. The first phase, the Affordable Housing Demonstration, includes 117 single-family detached manufactured homes. Phase II will include 50 duplex modular units and Phase III 40 four-plex modular units. Prices are targeted at 12-15 percent below comparably sized site-built homes. The anticipated market is the group of buyers who can pay a little more than the mobile home park price but less than the typical conventional subdivision home price.

The Project - Woodland Hills

Woodland Hills is located on an approximately 30-acre site in northeast Oklahoma City, not far from the city boundary. The site is part of a 60-acre tract along Interstate 35 which Holland is developing. The 30 acres





The term manufactured homes refers to units manufactured in accordance with Federal Manufactured Housing Construction and Safety Standards authorized by Title VI of the 1974 Housing and Community Development Act. This is a single, national standard for manufactured housing, administered by the Department of Housing and Urban Development (HUD). The homes, frequently referred to as HUD-Code units, are built on steel I-beam chassis with the axles, wheels, and hitch mechanisms removable once the homes are placed on foundations. The units must be set on permanent foundations to be eligible for 30-year mortgages. When so placed, they are treated as real property and are assessed and taxed at a rate percent of value, as are site-built homes.

Manufacturers of the first ten Woodland Hills units include Chief Industries, Inc., Aurora, Nebraska; Marlette Homes, Inc., Great Bend, Kansas; and Cameo Energy Homes, Inc., Big Springs, Texas. Four permanent sales models manufactured by Fuqua of Austin, Texas were added later. Each manufacturer or dealer who represents a manufacturer must submit all unit

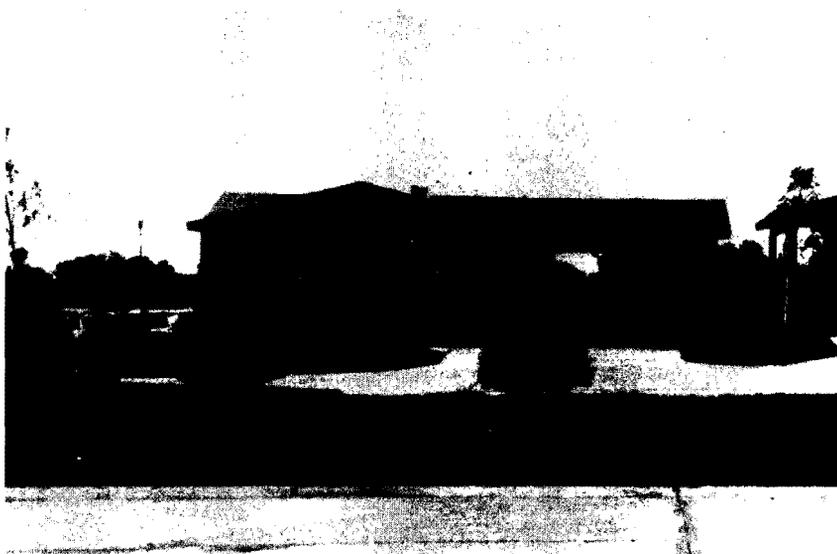
and lot plans to the Architectural Design Committee, a group established by the developer and including design professionals and the developer. The committee ensures compatibility of individual units with overall project objectives and with adjoining units. All proposed floor plans, elevation sketches, and landscape plans, as well as a plot plan showing location of the unit and all improvements, must be approved by the committee.

Model homes in Phase I, Section 1 of Woodland Hills range in size from 865 square feet to 1,530 square feet and sell for \$39,900 to \$57,500. Eight of the model homes are multi-sectional (double-width), and two are single 16-foot-wide units. All of the first 10 homes have 3/12 pitched roofs with shingles.

Each unit has a detached, two-car carport that is architecturally blended to the front or the side of the unit. Most units have site-built redwood decks or patios.

The narrow end of the homes face the street and are situated in clusters to provide increased individuality,

Woodland Hills model



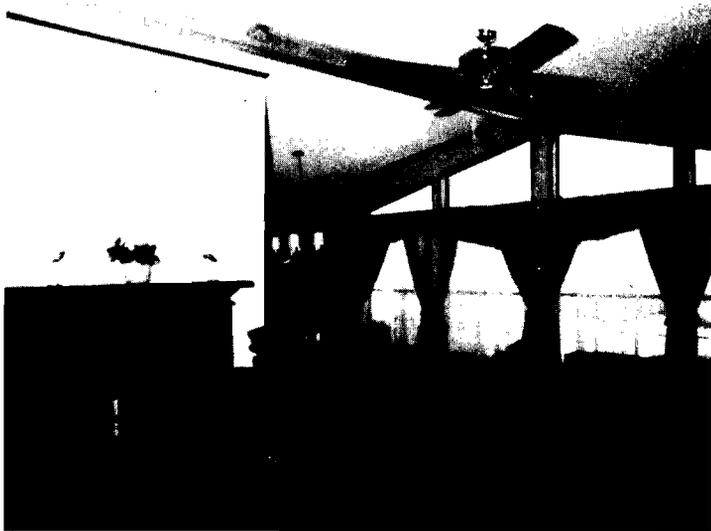
landscape planting areas, privacy, guest parking, utility savings, and traffic safety. Most homes are placed in a zero-lot line configuration to maximize outdoor space.

The Fuqua units in Phase I, Section 2, are all double-wide units, ranging from the low \$50,000's to the low \$60,000's. These models are available with various site-built additions. The smallest unit, just

Typical Woodland Hills design

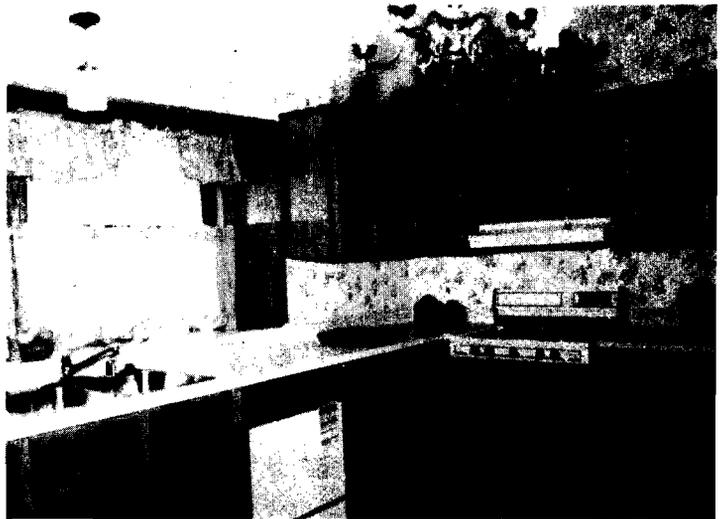


Zero lot line placement leaves ample space for deck and lawn.



Interior featuring several amenities

Typical Woodland Hills kitchen



Recently added Fuqua model

over 1,000 square feet, is placed parallel to the street and has a double garage attached to the unit by a breezeway. Another unit is sited perpendicular to the street and has a single attached garage. A two-car pad is in front of one model, and another has a detached carport. The Fuqua units have two or three bedrooms and 4/12 pitch roofs.

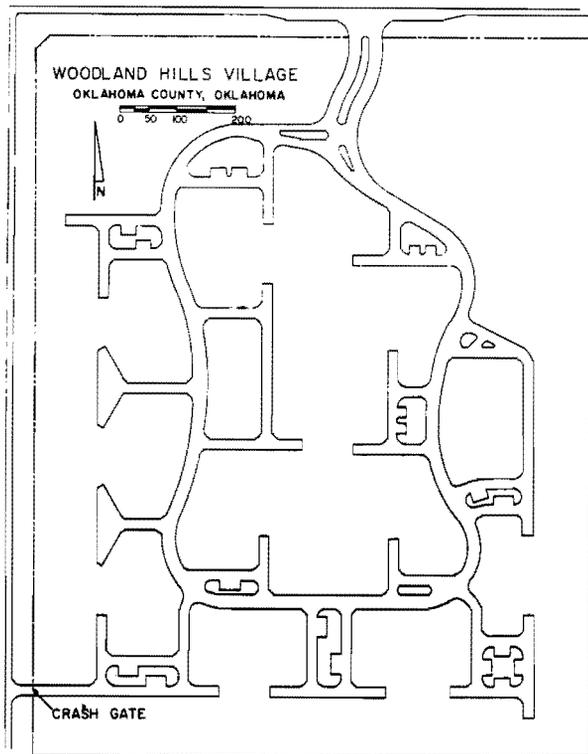
The only entrance to Woodland Hills is a parkway designed to provide smooth, safe vehicular movement in and out of the development. A serpentine loop road allows for traffic circulation throughout the project. An emergency entrance closed by a crash gate provides emergency entrance and exit only. The cluster site design places the



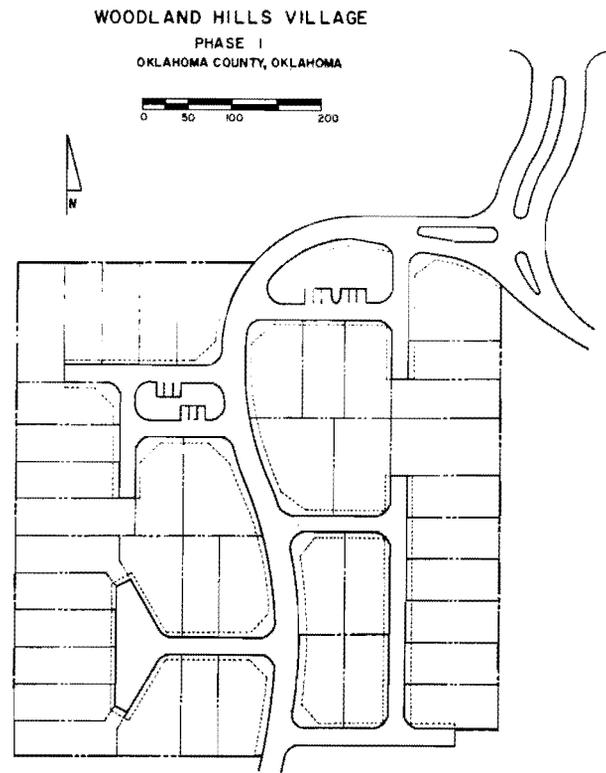
Fuqua model emphasizing Victorian-like detail



Fuqua unit



Circulation plan

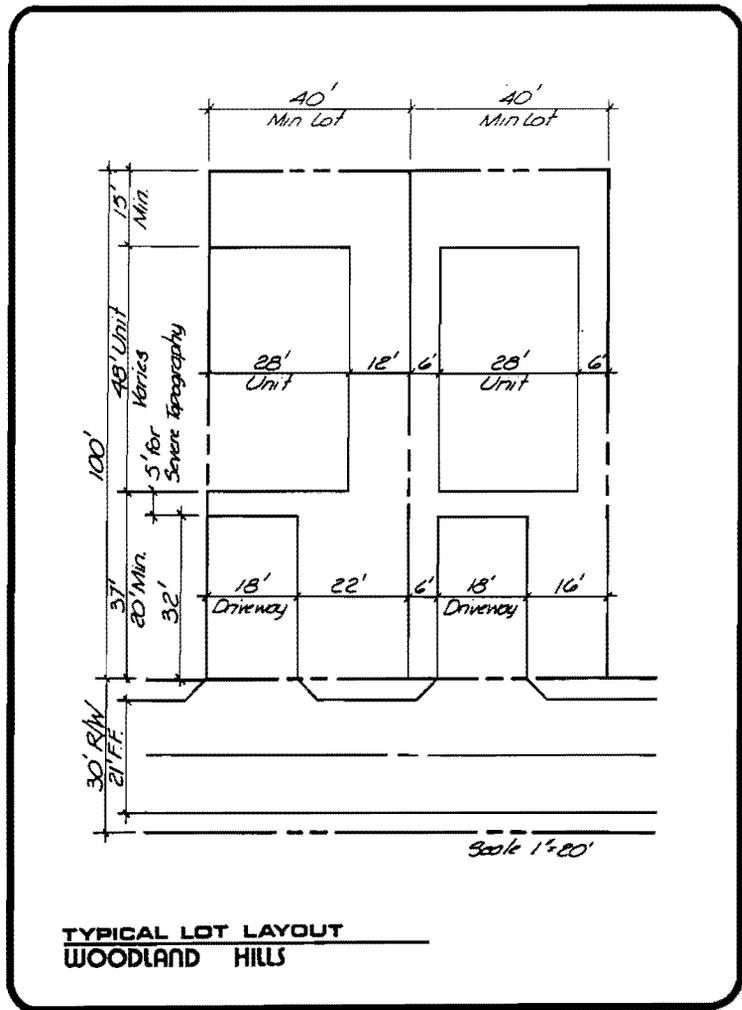


most dense development away from the loop road, creating a sense of openness and small neighborhoods. Walkways are located along the loop road and a pipeline easement, providing safe movement throughout the development, park, and the commercial center to the east.

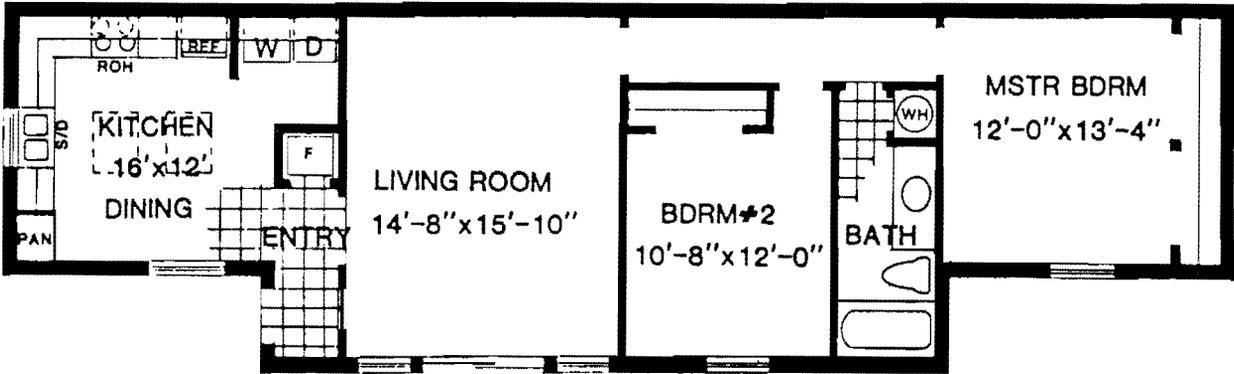
A two-acre park and recreation area abuts the entry, adding to the attractiveness of the project. The park also solves a difficult design situation in which a high-pressure pipeline easement intersects the section line roads in the corner of the property. The park contains an open area, playground, picnic shelter, benches, multiuse field area, and fitness trail. Landscaped

areas are designated at the project entry, in the clusters, along the serpentine loop, in the park, and in walkways.

Land planner for Woodland Hills, Glenn Turner Associates, maintained the natural vegetation of the area in the layout. He preserved 85 percent of the trees with diameters of 4 inches or more within 54 feet of the center of the property's perimeter. An 8-foot-high stockade fence screens the western and northern boundaries of the project. A homeowners association will maintain the project entry, park, open spaces, walkways, perimeter vegetation, and internal private streets.

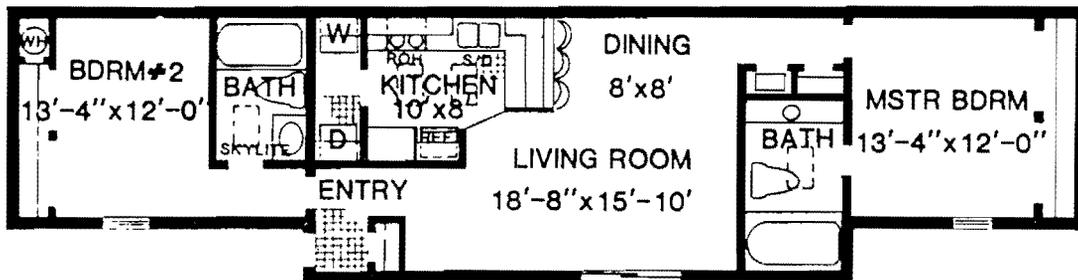


Woodland Hills site design allows maximum useable open space.



CH 3

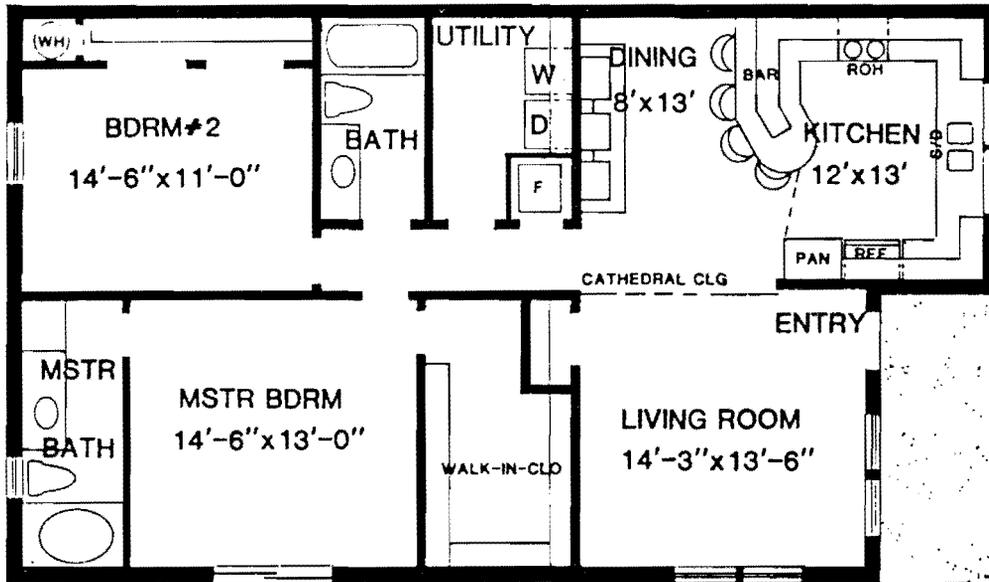
860sqft



CH 4

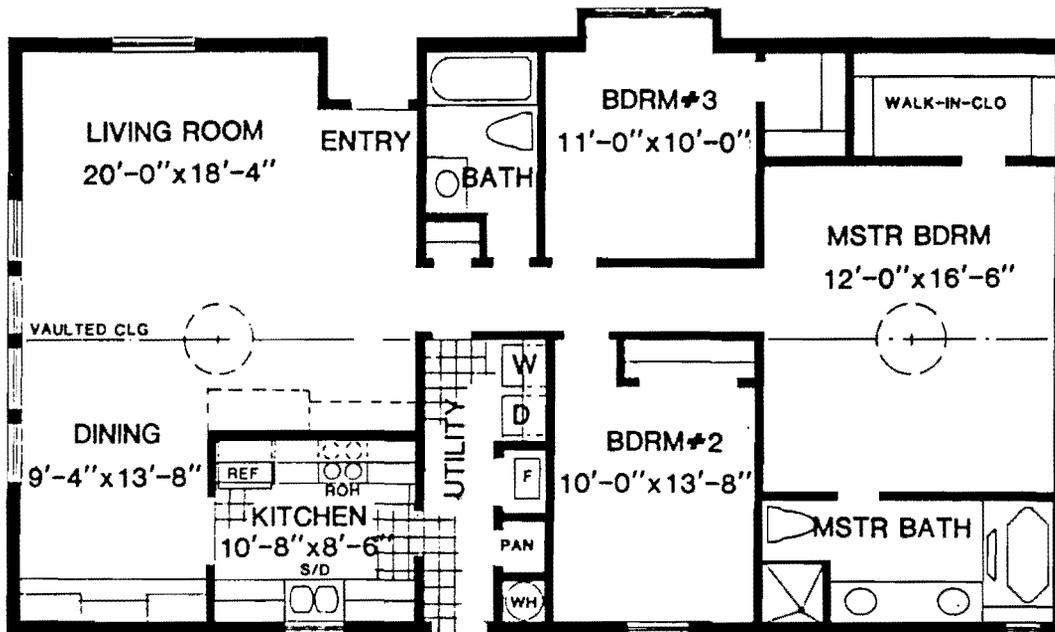
1008sqft

Sample floor plans



2803

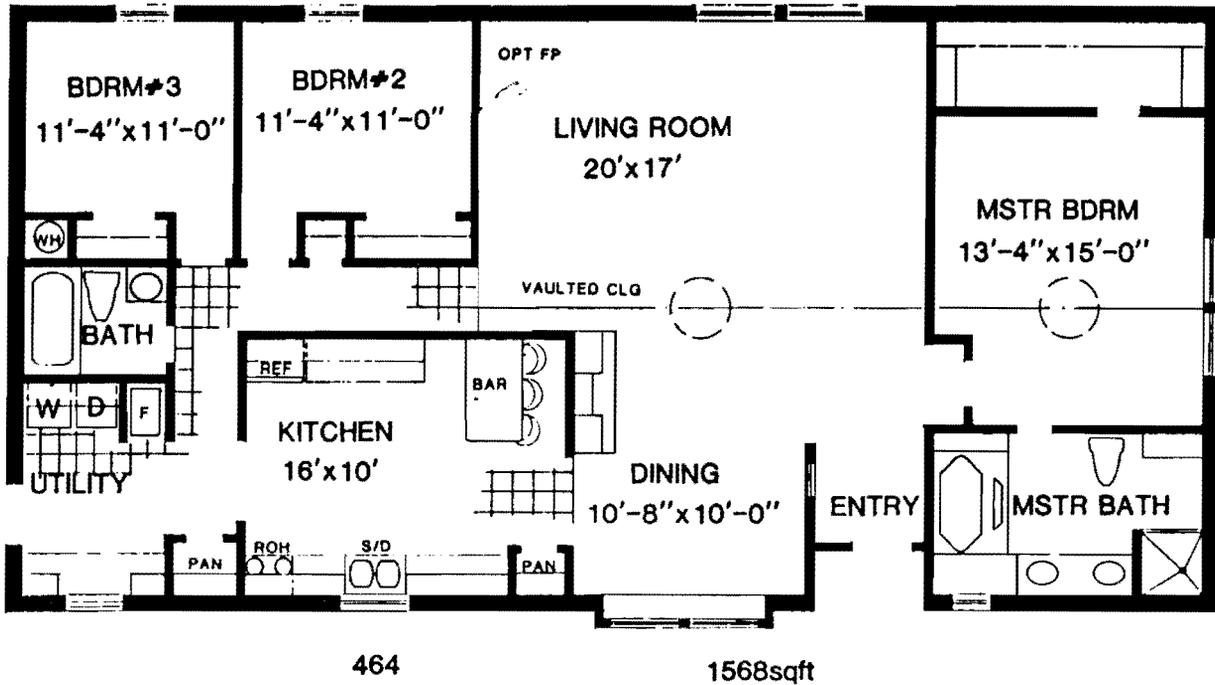
1200sqft



470

1344sqft

Sample floor plans



Sample floor plan

Project History

Background

Hal Bassett, Executive Director of the Manufactured Housing Association of Oklahoma (MHAO), initiated the Oklahoma City Affordable Housing Demonstration project. Since 1982, Bassett has encouraged the acceptance of manufactured homes by Oklahoma communities through an extensive education network and development of model manufactured home ordinances. To ensure maximum acceptance within the city, he formed a coalition of the Oklahoma County League of Women Voters and the Oklahoma City Chamber of Commerce to support his mission. For details of other MHAO activities, see Appendix I.

Bassett's objectives were similar to those of the HUD Affordable Housing Demonstration program in relaxing local regulations to foster the building of homes within the price range of potential homeowners now excluded from the market.

The selection of Woodland Hills as a national Affordable Housing Demonstration project was a natural outgrowth of the efforts of Bassett and the MHAO to encourage acceptance of manufactured housing as an affordable alternative to site-built homes. At the time Holland was planning Woodland Hills, the MHAO, with the assistance of an advisory committee, representing site-built home builders, leaders in the manufactured housing industry, governmental officers, and trade and professional organization representatives, was developing model ordinances for manufactured homes.

Goree James, Councilman of Ward 7 (the District in which Woodland Hills is located), introduced a resolution to the City Council encouraging the development of an affordable housing

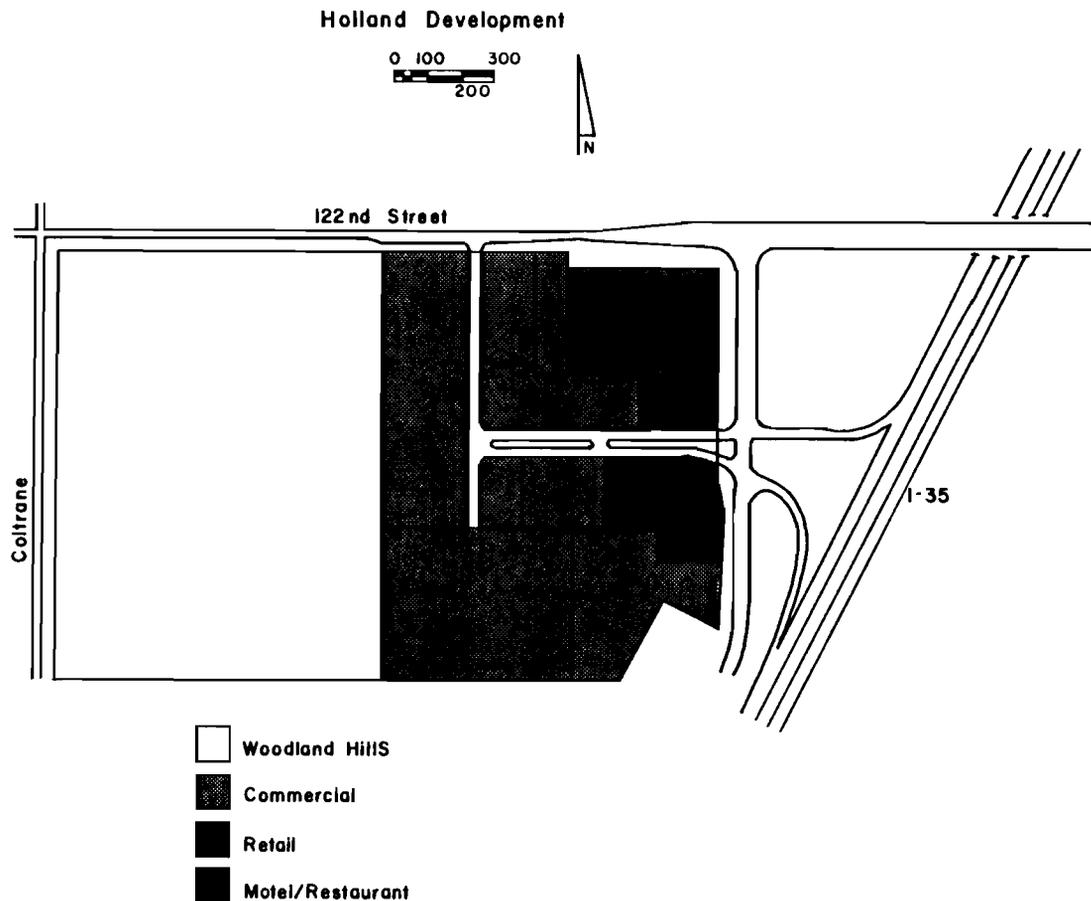
demonstration project and offered the council's expeditious review of such a project. Waiver or modification of procedures and code requirements would be considered where permitted by law. Following council approval, Mayor Andy Coates signed the resolution July 19, 1983.

Bassett, the MHAO, and the city proposed the Holland project to HUD as a demonstration project using the types of housing envisioned in the manufactured housing model zoning ordinance. HUD designated Woodland Hills as an official Affordable Housing Demonstration project in October 1983. Secretary Pierce praised the involvement of Mayor Andy Coates saying, "His support has made it possible for Oklahoma City to participate in the Affordable Housing Demonstration. Under his leadership the City Council passed a resolution encouraging affordable housing and pledging a willingness to consider waiving or modifying local code requirements. He was also able to get the support of the Chamber of Commerce, the League of Women Voters, and the Manufactured Housing Association of Oklahoma."

Zoning

To develop the 30 acres fronting on Interstate Highway 35 for commercial use, Jack Holland requested and received appropriate zoning. The remaining 30 acres of the tract were originally zoned R-MH-2, Mobile Home Park District, and R-MH-1, Mobile Home Subdivision District.

The Woodland Hills site was designated a Planned Unit Development (PUD) in January 1983. PUDs depart from the traditional lot-by-lot zoning requirements by allowing the developer to design a flexible plan



with a mixture of housing types and land uses. Normally, PUDs cluster dwellings more densely than usual, creating open areas. According to the Manufactured Housing Quarterly (Summer 1980), "A PUD is not just an alternative to conventional housing development. It is an easy way for planners and developers to ensure acceptance of manufactured housing neighborhoods."

The Oklahoma City PUD designation prevails over any other zoning designations. Density allowed by the PUD on the Holland site is "no more than 8 homes per acre" or 240 units for the 30 acres.

The neighbors' original reaction to the Woodland Hills PUD proposal was negative. Most of the opposition to the project was conceptual and based on experience; the neighbors did not

want "trailers on cinder blocks." The site abuts undeveloped property on the west, Holland Land Company's 30 acres zoned for commercial development on the east, KOA Campgrounds for recreational vehicles on the south, and single-family homes on rural estate lots on the north. Homes in the \$250,000 range line the first mile of the northern edge of the project within the Oklahoma City limits. Beyond the city boundary is the affluent suburb of Edmond, one of the most desirable metropolitan Oklahoma City residential areas.

The coalition formed by Bassett before the project began effectively overcame the opposition. Councilman Goree James defended Holland's proposal in the council and to the neighbors. Bassett and the MHAO, the League of Women Voters, and the Chamber of Commerce spoke in favor of

the project and attended the open council meeting as supporters.

Holland's presentation to the Council pointed out that the 207 units in the proposed development was less than the 240 units of manufactured housing permitted under the earlier zoning.

Subcontractors of the project, Glen Turner Associates and Ernie Hill Consulting Engineers, also supported Holland's proposal to the city.

Variances

When the MHAO, Bassett, the Holland Land Company, the Mayor of Oklahoma City, and HUD agreed to the concept of an Affordable Housing Demonstration project, Bassett, Holland, Turner, and Hill developed a list of development regulation variances to request of the city. Their goal was to provide affordable housing without compromising public health or safety.

The city staff considered the requests. Some were accepted under the PUD; several were approved for the demonstration. Others were disapproved or modified. (Chapter 3

discusses these requests in detail, and Chapter 4 identifies their cost savings.)

After agreement on the variances, the modified PUD was approved by the City Council. Site development began immediately.

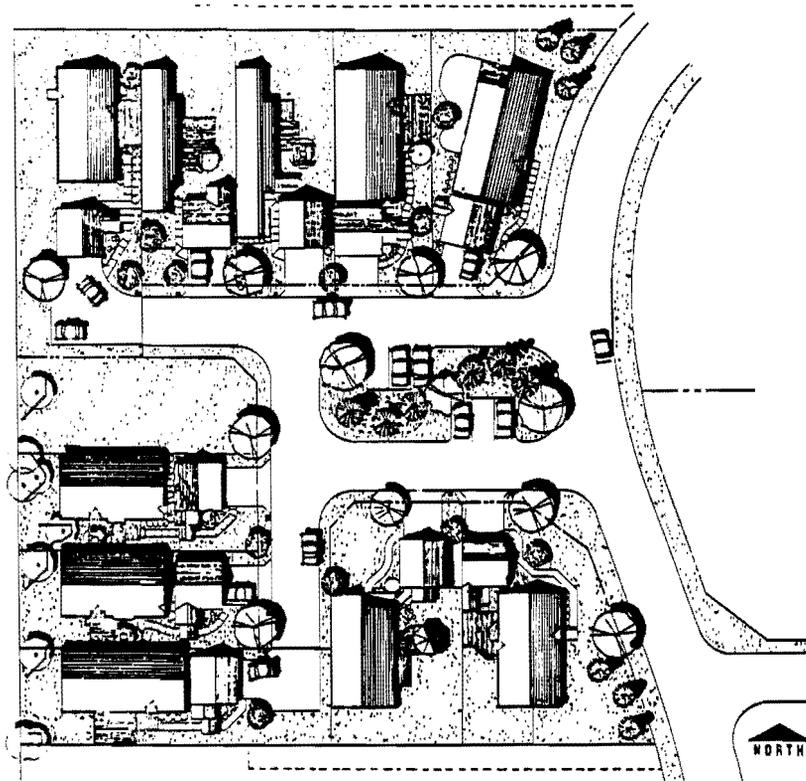
National Symposium on Affordable Housing

The League of Women Voters of Oklahoma County sponsored a Symposium on Affordable Housing in Oklahoma City on June 21-22, 1984. The symposium featured 30 national experts in zoning, planning, engineering, and the manufactured housing industry, and 10 local experts who donated their time to foster the acceptance of manufactured housing. Over 240 participants from the public and private sectors in 20 states attended. A description of the league's involvement in the demonstration appears in Appendix II.

Sample manufactured housing ordinances providing guidance on manufactured homes similar to the Woodland Hills units were featured.



Symposium participants tour Woodland Hills.



Symposium model homes

The attendees, municipal officials, property owners, and entrepreneurs, were told how they can apply such ordinances all over the country.

A focal point of the symposium was the advance opening in Woodland Hills of 10 model homes from three manufacturers. Symposium participants visited the site to view the homes discussed in the meetings. The units were in various stages of construction, enabling visitors to understand the foundation systems and site-built attachments and to see the viability of manufactured units compared with traditionally built homes. Attendees reacted favorably, and positive publicity was generated. More details of the symposium are given in Appendix III.

Grand Opening

The Grand Opening and ribbon-cutting ceremony for Woodland Hills was held

on August 18, 1984. Participating in the event were Jack Holland, Holland Land Company; Goree James, Councilman, OKC Ward 7; Hal Bassett, MHAO coordinator of the project and symposium; Carla Paul, President, Oklahoma County Chapter League of Women Voters and sponsor of the symposium; and Glen R. Turner, Glen R. Turner and Associates, Inc. designer of Woodland Hills.

Marketing

The 10 initial Woodland Hills models were opened for the symposium. By summer 1985, six of these units were sold and occupied. Two more were under contract.

The Holland Land Company signed 11 sales contracts during the first two months while the units were put in place and site construction completed. According to John Holland, however, only about 30

percent of the applicants were qualified buyers. "We need to sell these homes about three times," observed Holland.

In June 1985, Holland added four permanent sales models, manufactured by Fuqua, on key lots near the project entrance. A trained staff of sales personnel under the direction of John Holland are selling the

homes. The company is developing a computer program to aid prospective buyers in determining the price range of the homes they could qualify for in Woodland Hills.

The present economy of Oklahoma City accounts for slow sales. The Holland Land Company, however, and all others involved in Woodland Hills anticipate an improvement by summer 1986.



Grand Opening (left to right):
Jack Holland, Goree James,
Hal Bassett, Carla Paul,
Glen Turner



Innovations and Their Impact on Costs

The principal purpose of the Affordable Housing Demonstration program is to identify ways in which the city, builder, developer, planner, engineer, and architect can work together to reduce housing costs. The NAHB/RF collected and evaluated information and data on the approval process, residential development practices, and construction techniques to determine cost savings. The following discussion identifies modifications in regulations and standards that might result in reduced costs for new home buyers.

Administrative and Processing Changes

The PUD allowed Holland the flexibility to cluster homes, increase open spaces, and mix single-family detached units, duplexes, and four-plexes. The single-family detached units would be manufactured units. The duplexes and four-plexes would be modular units. As explained above, Holland submitted a modified PUD including the variances approved for the project.

The approval process for the modified PUD saved approximately one month.

Site Planning and Development Changes

Site planning and land development represent major areas of potential cost reduction for most builder/developers. These costs often increase in direct proportion to the complexity of local regulations, zoning requirements, and levels of required standards. Holland and Turner were able to cut costs of developed land in Woodland Hills due to the cooperation of Oklahoma City.

The Oklahoma City PUD allows a combination of housing types and clustering of units. Holland took advantage of this flexibility in the initial subdivision plans.

The city accepted 3,500 - 4,000-square-foot lots in place of the normal 5,000-square-foot lots. This, combined with the flexibility allowed by the PUD, enabled Holland to place the homes on smaller lots and thereby reserve space for a park and walkways, offering visual and recreational amenities.

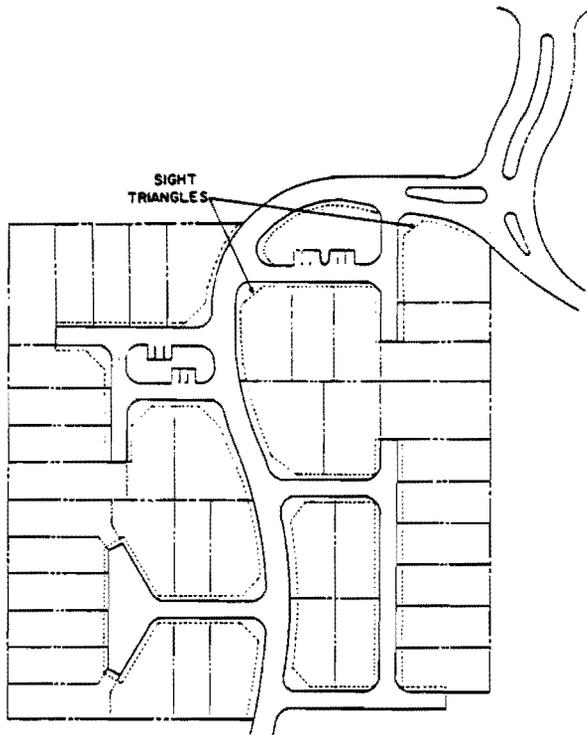
The city approved modified setbacks for the demonstration. Oklahoma City normally requires 20-foot front and rear setbacks. Holland was allowed 15-foot front setbacks and 10-foot rear setbacks. This, like the smaller lots, allowed a cluster design site plan and better utilization of land areas for privacy, recreation, and attractiveness.

The city questioned the proposed zero-lot-line siting of units due to its interpretation of the building code to require either a one-hour fire wall on the zero-lot-line side of the unit or setting the unit back from the lot line 3 feet. "This didn't make any sense to us," Holland said, "when the next unit was located at least 10 feet away, much more than the 6 feet allowed by the code if each home was set-back 3 feet from the property line. I don't believe fire knows where the property line is." This problem was solved by the Board of Adjustment, which decided in favor of the zero-lot-line concept for the demonstration.

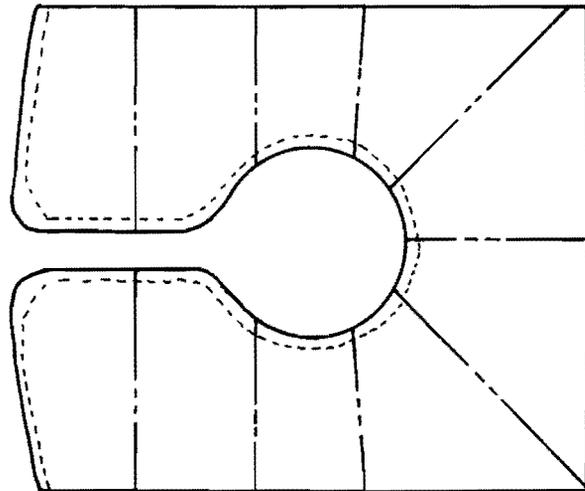
Holland and Turner requested reduced street rights-of-way and reduced street paving width and thickness. The city was not receptive to the

requested variances and agreed to reductions only on private streets maintained by the Woodland Hills Homeowners Association. Final approval was granted for a 24-foot collector loop street with a 40-foot right-of-way and 20-foot cluster streets with 30-foot rights-of-way. Streets were paved with a 5-inch Portland cement concrete slab on a 1-inch sand leveling course on 6-inch compacted subgrade or equivalent base thickness.

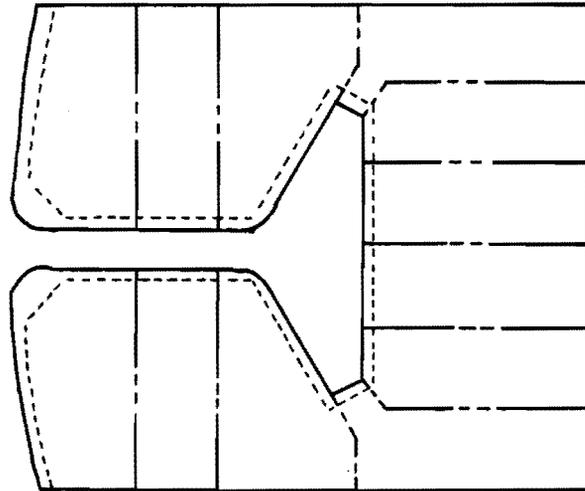
The city allowed 10-foot sight triangles on internal streets. (See drawing below.) T-turnarounds were approved instead of more typical bulb cul-de-sacs. These changes saved land as well as paving costs and created an interesting view.



Four-inch-high roll curbs were permitted instead of vertical curbs and gutters. In addition to the original cost savings of roll curbs, they also eliminate the need to make



Typical cul-de-sac



Woodland Hills T-turnaround

curb cuts for driveways, providing additional savings.



Woodland Hills roll curbs during construction

Private drainage swales and other drainage features not in accordance with standard specifications of Oklahoma City were permitted if maintained by the homeowners association.

Building Design and Construction

Four housing manufacturers, Chief, of Aurora, Nebraska; Cameo, of Big Springs, Texas; Marlette, of Great Bend, Kansas; and Fuqua, of Austin, Texas; produced and transported the homes to the sites.

Patios, carports, decks, and garages were constructed on site by local builders. The specifications of the first 10 Woodland Hills units are listed in Table 1.

The initial 10 Woodland Hills units include 2 single-wide units of 16 feet width and 8 double-wide units of 28 feet width. The Oklahoma legislature passed a law on January 27, 1984, allowing transport of 16-foot units in the state. Previous unit width limit for transport was 14 feet. Other states are reviewing and are considering similar legislation.



Two sections being joined on site to form a double-wide unit



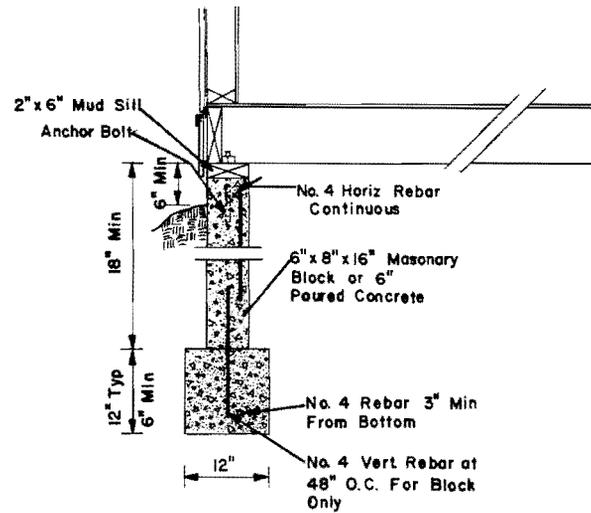
Double-wide
Fuqua unit

**TABLE 1 - SPECIFICATIONS OF THE FIRST
10 WOODLAND HILLS UNITS**

Lot No.	1	2	3	4	5	6	7	8	9	10	
Manu- fac- turer	Chief	Cameo	Chief	Chief	Chief	Chief	Chief	Cameo	Mar- lette	Mar- lette	Cameo
Width DW	28'	28'	16'	16'	28'	28'	28'	28'	28'	28'	28'
	DW	DW	SW	SW	DW	DW	DW	DW	DW	DW	DW
Sq. Ft.	1456	1530	1008	865	1200	1232	1232	1391	1285	1344	
Type Foun- da- tion	Peri- meter Stem- wall	Pier and Beam	Peri- meter Stem- wall	Peri- meter Stem- wall	Peri- meter Stem- wall	Peri- meter Stem- wall	Peri- meter Stem- wall	Peri- meter Stem- wall	Pier and Beam	Pier and Beam	Pier and Beam
Frame: Remain Remove	Re- move	Re- main	Re- move	Re- move	Re- move	Re- move	Re- move	Re- main	Re- main	Re- main	Re- main
Zero Lot Line	NO	YES	YES	YES	NO	YES	YES	YES	YES	YES	NO
Total \$ Sales Price		56,900	43,750		52,000			50,953		57,900	

All Woodland Hills homes were placed on permanent foundations. Two permanent foundation systems were used in Woodland Hills: a perimeter stemwall system and a pier and beam system. Both systems are compatible in appearance with conventional housing foundations.

In the perimeter stemwall system, the steel frame was removed--actually slid from under the home--and the home was placed on the permanent foundation. In other words, the home was perimeter loaded, with the weight directly distributed over the foundation walls instead of on the outriggers which distribute the weight in the pier and beam system. Chief used this perimeter stemwall system in its Woodland Hills units.



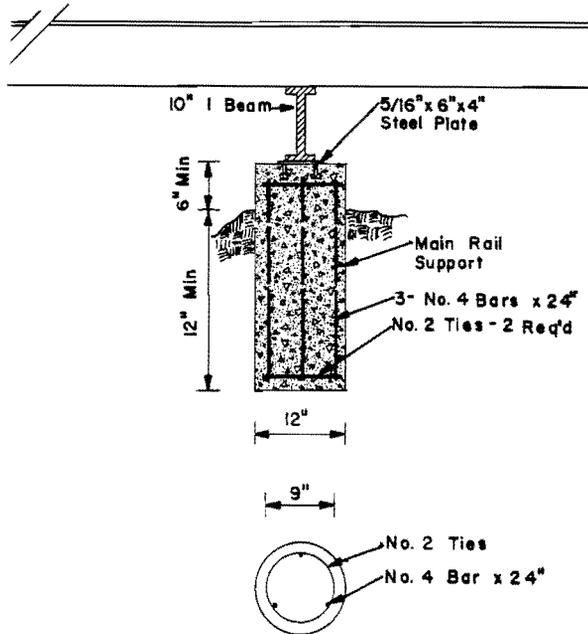
Perimeter loading foundation system

removing the frame and returning it to the plant for reuse, Chief effected considerable savings.

In the pier and beam foundation system, which Marlette and Cameo used, the weight of the unit is distributed by outriggers. The steel frame must remain in place.

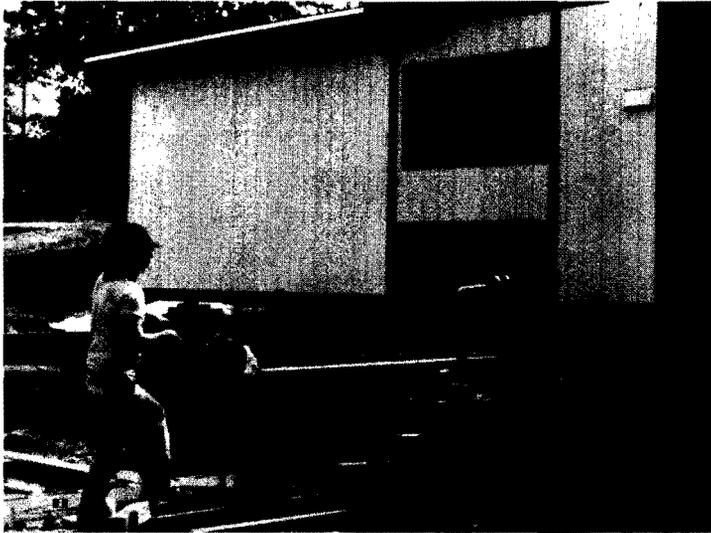
The Holland Land Company calculated that the original foundation systems for Woodland Hills were overdesigned. The system was based on a HUD-designed foundation using a 10-inch stemwall. The HUD design is a standard developed conservatively for general use by developers who do not calculate the design for specific situations. Holland's structural engineer designed a system using a 6-inch stemwall that was more than adequate.

The Brinkley-winch system was used to place the units on the foundation. The developer used this system instead of a crane because it is less expensive.

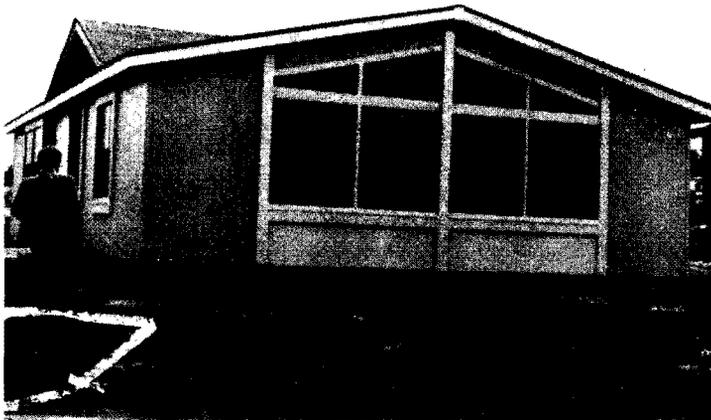
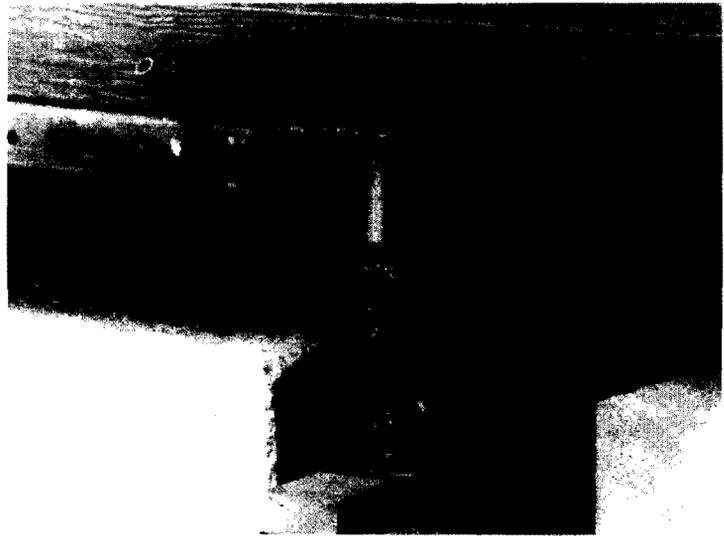


Pier and beam foundation system

Some manufacturers using the perimeter loading system chose to leave the steel frame in place. By



Brinkley-winch system of placing unit on foundation



Details of Changes and Their Costs

Administrative and Processing Changes

The city engineer and planning department of Oklahoma City had no authority to waive processing procedures. A city council resolution and use of the Planned Unit Development (PUD) ordinance, however, allowed the engineer and planning department to consider changes as well as to fast track processing, saving an estimated 30 days. It was estimated that interest savings amounted to about \$7,400 on land and overhead was reduced by about \$18,000. Therefore, total cost saving for the one-month processing time reduction was \$25,400 or \$181 per unit.

Site Planning and Development Changes

This section presents land development cost comparisons of Woodland Hills Village versus the

same project had it been built to standard Oklahoma City practices.

Density

The Woodland Hills site contained approximately 30 acres to be developed in three phases. Phase I, the demonstration portion, was planned for 117 single-family detached lots, 82 of which were zero-lot-line. Phases II and III will have 50 duplexes and 40 fourplexes respectively. Phase I covers approximately 21.6 acres, of which 4.5 acres were reserved for common areas. For the demonstration rights-of-way (ROW) were reduced from 60 to 40 feet on collector streets and from 50 to 30 feet on other streets. About 925 lineal feet of the collector street were shared between Phase I and Phases II and III. The net result of ROW reduction was a savings of 3 acres of land for building lots. At an average lot size of 4,576 square feet, 29

Land and Development Cost Comparison Summary

	Demonstration	Comparison	Total Savings	Savings Per Unit
Raw Land	\$432,000	\$432,000	-	\$1,217
Sanitary Sewer	169,912	161,167	(\$8,745)	379
Water Service	107,703	107,703	-	303
Storm Drainage	27,027	80,190	53,163	680
Streets/Paving	350,484	483,515	133,031	2,498
Curbs and Gutters	24,398	37,586	13,188	219
TOTALS	\$1,111,524	\$1,302,161	\$190,637	\$5,296

additional lots were created. In other words, had Woodland Hills been built to Oklahoma City standards, only 88 homes could have been built instead of 117. Due to the 33 percent density increase, infrastructure costs were spread over 29 more units. Net density (excluding common areas) was increased from 5.1 units per acre to 6.8 units per acre. All costs shown in this section reflect the density increase. Following is a summary of raw land and development costs for Woodland Hills, showing a 14.64 percent savings over typical costs.

Sanitary Sewer

No changes were made in sanitary sewer service in Woodland Hills. Eight-inch PVC mains and four-inch PVC laterals are used in normal Oklahoma City practice. Because of the density increase, sewer cost per unit was decreased slightly, although total costs increased due to 29 more laterals. Manhole spacing was unchanged, averaging one per every 375 feet of sewer.

Sanitary Sewer Cost Comparison			
	Demonstration	Comparison	Savings
8-in. PVC main	\$119,132	\$119,132	-
4-in. PVC laterals	35,280	26,535	-
Manholes	15,000	15,000	-
Connection to off site	500	500	-
TOTALS	\$169,912	\$161,167	(\$8,745)
COST PER UNIT	\$ 1,452*	\$ 1,831**	\$ 379
* 117 units			
** 88 units			

Water Service

Woodland Hills' water service was built to Oklahoma City's standards.

The density increase resulted in decreased cost per unit.

Water Service Cost Comparison

	Demonstration	Comparison	Savings
8-in. PVC main	\$ 22,680	\$ 22,680	-
4-and 6-in. PVC main	85,050	85,050	-
TOTALS	\$107,730	\$107,730	-
COST PER UNIT	\$ 921	\$ 1,224	\$303

* 117 units

** 88 units

Storm Water Drainage

Oklahoma City requires inlet pickups to underground reinforced concrete pipes for storm water drainage. In Woodland Hills, the layout was designed to efficiently provide drainage through swales and onto streets. Some inlet pickups and underground reinforced concrete pipe (RCP) were installed along Coltrane

Road on the western edge of the subdivision, since storm water from about 5 acres of adjoining property requires drainage into the subdivision. Drainage costs for the entire 30 acres were prorated to obtain costs for the 21.6 acre demonstration site.

Storm Water Drainage Cost Comparison

	Demonstration	Comparison	Savings
24-in. RCP	\$18,698	\$48,600	-
30-in. RCP	5,473	23,328	-
Concrete Inlets	2,856	8,262	-
TOTALS	\$27,027	\$80,190	\$53,163
COST PER UNIT	\$ 231*	\$ 911**	\$ 680

* 117 units

** 88 units

Streets/Paving

For the demonstration, Oklahoma City allowed reductions in street widths and paving thickness. Collector street width was reduced from 32 to 24 feet, and all other street widths were reduced from 26 to 18 feet. Paving thickness was reduced from 6 inches of concrete to 5 inches. T-turnarounds replaced cul-de-sacs. Thirty-six common off-street parking spaces accommodate extra vehicles.

Total paving area in Phase I was reduced from 177,763 square feet to 135,322 square feet. Cost per square foot was reduced from \$2.72 to \$2.59 due to the 1-inch reduction in thickness. One-half of a 925-foot-long section of the collector street was allocated to Phase II. The remainder of the collector street was allocated to Phase I. The following table shows cost reduction for all paving.

Streets/Paving Cost Comparison			
	Demonstration	Comparison	Savings
24'-collector, 18'-side streets, 36 parking spaces, T-turnarounds, 5"-thick paving	\$350,484	-	-
32'-collector, 26'-side streets, cul-de-sacs, 6"-thick paving	-	\$483,515	-
TOTALS	\$350,484	\$483,515	\$133,031
COST PER UNIT	\$ 2,996	\$ 5,494	\$2,498
* 117 units			
** 88 units			

Curbs and Gutters

Oklahoma City usually requires vertical, 6-inch-high curbs, but for the demonstration roll curbs were

allowed. The following are curb cost comparisons.

Curb Cost Comparison			
	Demonstration	Comparison	Savings
Roll Curbs	\$29,045	-	-
Vertical curbs-6"	-	\$44,745	-
TOTAL	\$29,045	\$44,745	\$15,700
COST PER UNIT	\$ 207*	\$ 411**	\$ 204

* 140 units
** 109 units

Building Design and Construction Changes

Due largely to the marketing and production systems used by the manufactured home industry, it was not possible to develop a detailed comparison of building costs for the demonstration units with similar conventionally built homes in the Oklahoma City area.

Average price for the demonstration units is just under \$43/square foot of floor area; this price includes the cost of the manufactured unit delivered to the site and set in place on a site-constructed foundation, site improvements including landscaping and utility infrastructure, building improvements including site-built components, land costs, and various overhead items. No detailed breakdown of these costs is available from the builder.

Prices of similar units in the Oklahoma City area vary from about \$38/square foot for one group of

small homes to about \$50/square foot throughout the area. A subdivision near Woodland Hills is priced just over \$43/square foot.

Given the lack of hard cost data on building features, no savings have been attributed to the use of manufactured housing in the following cost analysis.

On the Chief units, Holland received a credit of \$1,340 per unit for returning the detachable steel undercarriage to the manufacturer. These units had stronger floors costing \$500 more than usual, resulting in a net credit of \$840.

Perimeter foundations for all units were constructed as crawl space foundations in site-built homes, although only the Chief units required a perimeter foundation because of loading requirements after removal of the steel I-beam undercarriage. The remainder of the units were loaded on piers supporting the undercarriage.

Total Cost Savings Summary

Following is a summary of all cost savings for the Oklahoma City demonstration project. These represent a 10.5 percent savings on an average \$52,000 Woodland Hills homes.

	Savings Per Unit
Administrative and processing	\$ 181.00
Land and land development	5,296.00
TOTAL	\$5,477.00

MHAO Activities

The Manufactured Housing Association of Oklahoma (MHAO) is a federation or trade association representing all parts of the manufactured housing industry in Oklahoma. MHAO members include manufacturers, transporters, craftsmen, dealers, insurers, and lenders working in the manufactured housing industry.

A recent focus of the MHAO has been to encourage communities to allow manufactured housing on an equal basis with other kinds of housing. According to Hal Bassett, executive director of MHAO, "Most zoning ordinances prohibit locating manufactured housing in residential neighborhoods, relegating it to mobile home parks, often in less desirable sections of the town or County. That's what the MHAO and I are seeking to change."

In many communities, manufactured housing installations require rezoning for mobile home sites or a mobile home subdivision. If rezoning is not allowed, some communities permit the person to obtain a variance, often from the Board of Adjustment, to place the mobile home according to certain conditions. In this case, when the property is sold, the variance expires and the new owner must go through the public hearing process again to locate a mobile home on the site.

In general, communities in Oklahoma are concerned about the effect of forcing manufactured housing into the urban fringe areas where their placement is often unregulated, posing future problems to the communities when these areas are eventually annexed. Other communities are trying to allow the units in more convenient areas. However, most communities do this by creating special zoning districts for

manufactured home subdivisions, as described above. This is contrary to recent court decisions directed to community officials to treat manufactured housing which is similar in appearance to conventional housing the same as conventional housing.

While some smaller communities have not regulated residential development and have allowed the indiscriminate mixing of manufactured homes and other types of housing units, the majority of communities either prohibit manufactured units altogether or allow them only in approved mobile home parks or in agricultural zones on the fringes of the city. In fact, in Oklahoma almost two-thirds (63.5%) of all manufactured homes are located in rural areas.

To alleviate these situations and to allow the similar treatment of all housing irrespective of the method of construction, the MHAO under the leadership of Hal Bassett and assisted by an Advisory Board and an Industry Task Force, prepared a long-form model ordinance and a short-form model ordinance. Section 1, Intent, short-form states:

"It is the intent of this ordinance to encourage provision of alternative modest income housing in general residential areas by permitting the use of certain manufactured homes, as defined herein, in all districts in which similar dwellings constructed on site are permitted, subject to the requirements set forth herein to assure acceptable similarity in exterior appearance between such manufactured homes and dwellings that have been or might be constructed under these and other lawful regulations on adjacent or nearby lots in the same district."

The entire short form appears below.

Since completion in June 1983, the Model Ordinances have been used by six Oklahoma communities. Oklahoma City is studying and considering adoption of the model Ordinance.

MODEL ORDINANCE

(Short Form)

AN ORDINANCE AUTHORIZING DEVELOPMENT OF MANUFACTURED HOUSING IN RESIDENTIAL ZONES

AN ORDINANCE REGULATING THE PLACEMENT OF MANUFACTURED HOUSING, AMENDING THE ZONING ORDINANCE, ESTABLISHING PERMITS AND A FEE SCHEDULE, AND INSTITUTING PENALTIES FOR VIOLATIONS

CHAPTER _____

MANUFACTURED HOMES

SECTION 1. INTENT

SECTION 2. DEFINITIONS

SECTION 3. STANDARDS

SECTION 4. PERMITS

SECTION 5. APPEAL

SECTION 6. PENALTY FOR VIOLATION

SECTION 7. SEVERABILITY CLAUSE

SECTION 1. INTENT

It is the intent of this ordinance to encourage provision of alternative modest income housing in general residential areas by permitting the use of certain manufactured homes, as defined herein, in all districts in which similar dwellings constructed on site are permitted, subject to the

requirements set forth herein to assure acceptable similarity in exterior appearance between such manufactured homes and dwellings that have been or might be constructed under these and other lawful regulations on adjacent or nearby lots in the same district.

SECTION 2. DEFINITIONS

- A. EXPANDO UNIT means an expandable manufactured housing unit.
- B. FOUNDATION CODE means the "standard for the Permanent Installation of Manufactured Homes" as adopted by Ordinance.
- C. MANUFACTURED HOME means a dwelling unit fabricated on or after June 15, 1976, in an off-site manufacturing facility for installation or assembly at the building site as a permanent structure with transport features removed, bearing a seal certifying that it is built in compliance with the Federal Manufactured Housing Construction and Safety Standards Code.
- D. MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARDS means the standard for the construction, design, and performance of a manufactured home as set forth in the Code of Federal Regulations, Title 24, Parts 3280, 3282, 3283, and 42 USC 5401, ET SEQ, as mandated in the United States of America and as administrated by the United States Department of Housing and Urban Development.
- E. MOBILE HOME means a movable or portable structure built prior to June 15, 1976, the effective date for the federal Mobile Home Construction and Safety Act of 1974, which is larger than three hundred and twenty (320) square feet, and designed to be used as a year-round residential

dwelling. A mobile home may or may not be permanently attached to the ground, and its transport features may or may not be removed.

- F. SPECIAL EXCEPTION PERMIT means a device for permitting a use within a district other than a principally permitted use.

SECTION 3. STANDARDS

A. PERMITTED PLACEMENT OF MANUFACTURED HOMES

The establishment, location, and use of manufactured homes as scattered-site residences shall be permitted in any zone permitting installation of a dwelling unit, subject to requirements and limitations applying generally to such residential use in the district and provided such homes shall meet the following requirements and limitations:

1. The home shall meet all requirements applicable to single-family dwellings and possess all necessary improvement location, building, and occupancy permits and other certifications required by the code;
2. The home shall (be larger than _____ square feet of occupied space) or (meet the

minimum square footage requirements for the appropriate zone);¹

3. The home shall be attached and anchored to a permanent foundation in conformance with the regulations in the Foundation Code and with manufacturer's installation specifications;
4. The home shall be covered with an exterior material customarily used on site-built residential dwellings, and such material shall extend over the top of the foundation (or meet the community's site-built residential dwelling home standards).²
5. The home shall have a roof composed of a material customarily used on site-built residential dwellings, such as asbestos, fiberglass, shake, asphalt or tile, which shall be installed onto a surface appropriately pitched for the materials used.²

B. PERMITTED PLACEMENT OF MOBILE HOMES

Mobile homes shall be placed only within a Mobile Home Park and their placement governed by those regulations as set forth by the Mobile Home Park Ordinance.

¹The minimum square footage should be based upon locally available products. A minimum of 400 square feet is suggested unless the current Zoning Ordinance has set forth square footage minimums in which case those should apply.

²The appropriateness of siding and roofing materials can be determined by the designated administrator on a case-by-case basis, or an approved siding and roofing materials list can be developed and adopted by Resolution (see example at end of ordinance).

C. STRUCTURAL ADDITIONS OR ALTERATION

Due to its integral design, any structural alteration or modification of a manufactured or mobile home after it is placed on the site must be approved by the authorized (Zoning Administrator) (Clerk) (Building Administrator) or (other designee) of the (Town) (City) of _____. All structured additions shall comply with the Municipality's Building Codes.

SECTION 4. PERMITS

A. ZONING CLEARANCE PERMIT

Prior to the location, relocation, or establishment of any manufactured home outside of a Mobile Home Park, the homeowner or authorized representative shall secure a Zoning Clearance Permit which states that the building and its location conforms with the Zoning Ordinance, as herein amended.

B. TEMPORARY USE PERMIT³

1. Subject to conditions, fees, and standards otherwise required in the Zoning Ordinance, a temporary use permit may be issued:
 - a. To an applicant in the process of building a site-built dwelling to locate a manufactured or mobile home on a building lot during the course of construction of the dwelling; such permit shall not be issued until

after a building permit for the dwelling has been issued;

- b. To an applicant to use a manufactured or mobile home as a caretaker's quarters or construction office at a job site;
- c. To an applicant whose own health or the health of another necessitates care, and where the facts show that an unnecessary hardship would occur if not permitted to locate a manufactured home adjacent to the residence of one who is able to provide such care or in need of such care.

2. Length of Temporary Permit

A temporary use permit may be issued by the Board of Adjustment for a period not to exceed one (1) year. The temporary permit may be renewed for an additional one (1) year period upon showing of good cause, and with permission to do so. However, the Board of Adjustment may authorize a temporary use permit to an applicant for a health- or age-related circumstance for a period coterminous with the health- or age-related circumstance.

3. Permit Expiration

At the time the temporary permit expires, the manufactured or mobile home

³These provisions are suggested and are not mandatory.

and all appurtenances shall be removed from the property within ninety (90) days.

Dollars (\$_____) per day may be entered for a violation of this Ordinance.

C. UTILITY REQUIREMENTS

Manufactured or mobile homes used for permanent or temporary uses shall have an approved water supply, sewage disposal system, and utility connections.

D. ZONING CLEARANCE OR TEMPORARY USE PERMIT FEE

A zoning clearance or temporary use permit shall be issued by the designated administrator. The fee shall be Dollars (\$_____) ⁴ and is in addition to all other required permits for utilities and sewage disposal systems.

B. SUBJECT TO REMOVAL

A home, sited upon property in violation of this Ordinance, shall be subject to removal from such property. If action is required to bring compliance, the expenses involved may be made a lien against the property.

C. REMOVAL METHOD

The designated administrator may institute a suit in an appropriate court for injunctive relief to cause such violation to be prevented, abated, or removed.

SECTION 5. APPEAL

An action to review any order, requirement, decision, or determination made by an administrative official or board charged with enforcement of the Zoning Ordinance shall be to the Board of Adjustment.

SECTION 6. PENALTY FOR VIOLATION⁵

A. FAILURE TO COMPLY

Each day of non-compliance with the provisions of this Ordinance constitutes a separate and distinct Ordinance violation. Judgment of up to _____

SECTION 7. SEVERABILITY CLAUSE

If any section, subsection, paragraph, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of this Ordinance. It is being expressly declared that this Ordinance and each section, subsection, paragraph, sentence, clause, and phrase would have been adopted regardless of the fact that any one or more sections, subsections, paragraphs, sentences, clauses, or phrases be declared invalid or unconstitutional.

⁴Twenty-Five Dollars (\$25.00) is the customary permit fee.

⁵The Ordinance violation procedure for manufactured homes should be consistent with the procedure used for other violations in the local Zoning Ordinance.

**APPROVED SIDING AND ROOFING
MATERIALS LIST⁶**

1. The following siding materials are approved for usage on manufactured homes:
 - a. Residential horizontal aluminum lap siding
 - b. Residential horizontal vinyl lap siding
 - c. Cedar or other wood siding
 - d. Wood grain, weather resistant, press board siding
 - e. Stucco siding
 - f. Brick or stone siding
 - g. Other approved siding materials which are aesthetically compatible
2. The following roofing materials are approved for usage on manufactured homes:
 - a. Asbestos shingles on a roof pitched according to the design specifications of the shingles
 - b. Fiberglass shingles on a roof pitched according to the design specifications of the shingles
 - c. Shake shingles on a roof pitched according to the design specifications of the shingles
 - d. Asphalt shingles on a roof pitched according to the design specifications of the shingles
 - e. Tile materials on a roof pitched according to the design specifications of the materials

⁶This is an example of an administrative form which can be used to regulate approved siding and roofing materials. It is not a part of the Ordinance.

League of Women Voters' Involvement in the Affordable Housing Demonstration

The League of Women Voters of Oklahoma County became interested in manufactured housing when they observed that many applications for manufactured housing parks were generating citizen controversy concerning impact on schools, sewers, water, taxation, etc. The group decided to study manufactured housing as a special emphasis in 1982.

As the study progressed, the League realized manufactured housing industry people and employees in the Oklahoma City Planning Department had never met, and that there were no written policies on manufactured housing in most other cities in Oklahoma County or the County itself.

The League began to work with Hal Bassett, Executive Director of the Manufactured Housing Association of Oklahoma (MHAO). In February 1983, Bassett asked the League to help sponsor a symposium on manufactured housing at the opening of the planned Stillwater, Oklahoma Affordable Housing Demonstration project. After extensive deliberations the Board of the League agreed. In late March, 1983, the League's study units discussed and answered the following

questions as background for the symposium.

1. Where would you prefer to see mobile home/manufactured housing located? i.e. rural, inner-city, infill, fringe areas, manufactured housing parks and subdivisions.
2. What code restrictions be enforced for the above locations?
3. What types of consumer financing should be used? Is the availability of financing adequate?
4. How should mobile/manufactured housing be typed?
5. Do you consider mobile/manufactured housing an affordable, safe and sanitary housing option for you, your children and grandchildren?

Unfortunately, the proposed Stillwater project was dropped in early April 1983, due to the shut-down of one of Stillwater's four main industries. When the Woodland Hills project was designated by HUD in October 1983, the League of Women Voters resumed its plans for a Symposium on Manufactured/Affordable Housing, and moved the date to June, 1984.

National Symposium on Affordable Housing

The League of Women Voters of Oklahoma County sponsored a National Symposium on Affordable Housing on June 21-22, 1984 in Oklahoma City. The purpose of the symposium was to allow public and private decision-makers to examine the issues and potential of manufactured housing in meeting the need for affordable housing. Thirty national experts and ten local experts donated their time as a public service to share their expertise on the subject. The audience included builders, developers, manufactured housing experts, realtors, investors and municipal, county, state and national government officials involved in housing decisions.

A highlight of the symposium was the inspection tour of Woodland Hills, the Affordable Housing Demonstration project featuring 10 manufactured housing units being placed on their permanent concrete foundations, double-wide units being attached, and carports and patios being built on site. Landscaping was incomplete, but visitors were able to walk around the site and examine the interiors of several units.

The Symposium program included the following key addresses:

"The Problems We Face in Housing Our Citizens," Councilman Goree James.

"The Federal Responsibility," James Nistler, HUD, Washington, D.C.

"Manufactured Housing Industry - Meeting the Challenge," Holt Blomgren, President, National Manufactured Housing Federation

"The Community - Meeting the Challenge," Dorothy Ridings, President, League of Women Voters, USA.

Specific workshops included:

How to Put a Manufactured Housing Project Together

Putting the Financial Package Together

Selecting the Project

Development Process

Zoning Challenge

Woodland Hills - Putting the Project Together

The Regulatory Process and Manufactured Housing

Zoning - The Local Issue

HUD Construction Code and Existing Land Building Codes

The Model Codes: What Shall I Do in My Community

Appendix IV

Resources

The following people were instrumental in the success of this project:

Hal Bassett, Executive Director, Manufactured Housing Association of Oklahoma

Goree James, District 7 Oklahoma City Council

Jack Holland, Chairman of the Board, Holland Land Company

John Holland, President, Holland Land Company

Glen R. Turner, President, Glen R. Turner & Associates

Roger Barrett, Project Designer, Glen R. Turner & Associates

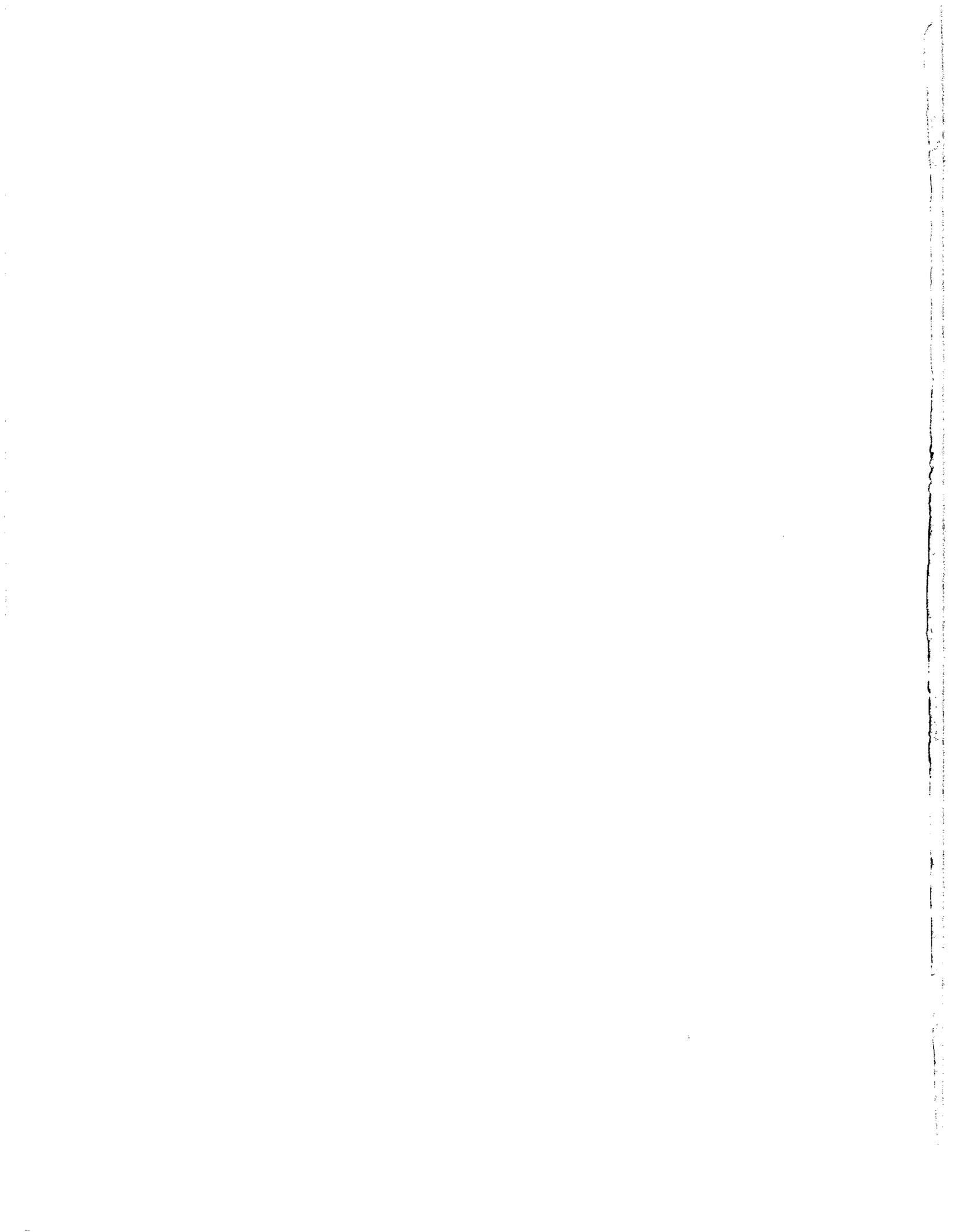
Ernie D. Hill, Jr., President, E. D. Hill Surveying & Engineering Company

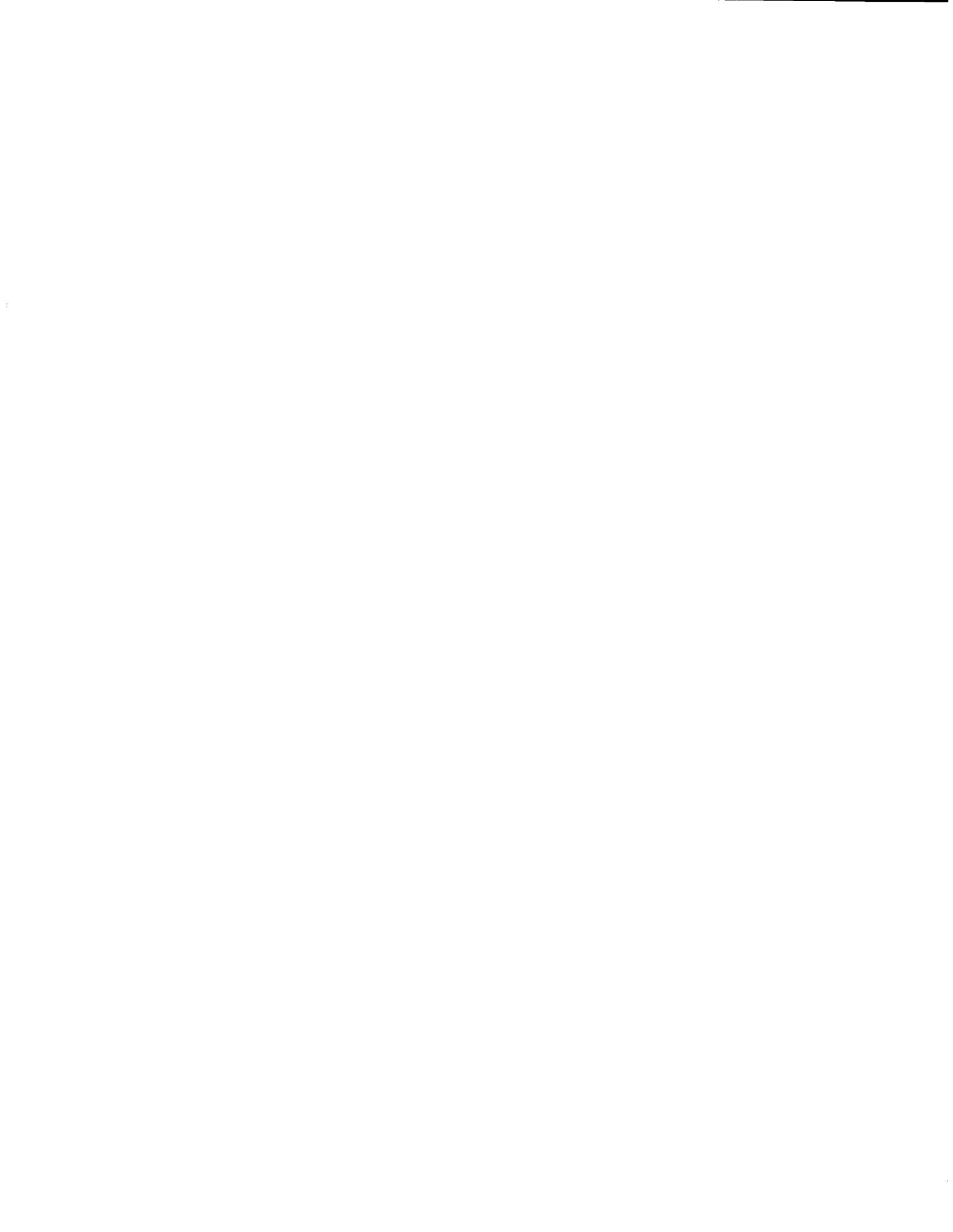
Carla B. Paul, President, Oklahoma County League of Women Voters

Merrel H. Medley, Community Development Director, City Engineer

Robert Hunt, Director of Housing Development Oklahoma City Office, Department of Housing and Urban Development

Ronald J. Morony, Program Manager, Department of Housing and Urban Development





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