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PANTEGO COMPREHENSIVE PLAN
REPORT NO. 1
POPULATION
GOALS, OBJECTIVES AND STRATEGIES
LAND USE
HOUSING
SANITARY SEWER SYSTEM
ENVIRONMENTAL CONSIDERATIONS

JUNE 1976

PREPARED THROUGH THE COOPERATION
OF THE
DEPARTMENT OF COMMUNITY AFFAIRS
OF THE
STATE OF TEXAS

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NO. CPA-TX-06-16-1144

CARTER & BURGESS, INC.
ENGINEERS - PLANNERS
FORT WORTH, TEXAS

ACKNOWLEDGEMENTS

TOWN OF PANTEGO, TEXAS
COMPREHENSIVE PLAN REPORT NO. 1

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POPULATION

POPULATION

TOWN OF PANTEGO, TEXAS
COMPREHENSIVE PLAN REPORT NO. 1

I. EXISTING POPULATION

Table A - Estimated Population in Occupied Dwelling Units

<u>Dwelling Unit Type</u>	<u>No. Occupied Dwelling Units a/</u>	<u>Population Per Occupied D.U. b/</u>	<u>Total Est. Population</u>
Single Family:			
- Conventional	595	3.6	2,142 (89%)
- Mobile Home	0	-	
Two Family	6	3.4	20 (0.9%)
Multi-Family (Apts. & Townhouses)	<u>111</u>	<u>2.2</u>	<u>244 (10.1%)</u>
Total Estimate:	712	3.4	2,406 (100%)

a/ - Derived from "windshield" survey of March, 1976 by Carter & Burgess, Inc.

b/ - Adjusted from 1970 census data by Carter & Burgess, Inc.

Existing Population Estimate (Range): 2,406 - 2,563 persons

<u>Persons Per Occupied D.U.</u>	<u>Estimated Population</u>
3.4	2,406
3.5	2,492
3.6	2,563

Population growth trends since 1950, following the Town's incorporation on January 5, 1952, are depicted in Table B. Boundary settlements with Arlington and Dalworthington Gardens, and resulting census enumeration confusion, accounts for the population "decline" between 1950 and 1960. The fastest growth rate occurred during the period of 1960-1970 (157 persons per year), which is directly attributable to the parallel growth of the metroplex area - expansion of employment opportunities. The rate of growth during the past 6 years (1970-1976) has slowed considerably, to a rate of 99 persons added per year. This slowdown in growth rate is a result of slackening economic conditions and a "peaking out" of the metroplex growth rate. Pantego's growth rate will, however, continue to be influenced by the growth of its sister City of Arlington, and area employment expansion.

Table B - Population Growth Trends (U. S. Census)

<u>Year</u>	<u>Population</u>	<u>Population Change</u>		<u>Annual Population Growth Rate Per Year Per Period</u>
		<u>Amount</u>	<u>Percent</u>	
1950	648	-	-	-
1960	238	-410	-63%	-41
1970	1,812	1,574	660%	157
1976*	2,406	594	32%	99

* - Estimated by Carter & Burgess, Inc.

A. Existing Population Distribution. Examination of the map titled "Existing Structural Conditions and Environmental Constraints," found in the "Housing" section of this report, reveals the location of residential and non-residential buildings. By applying the existing household size ratio of 3.6 persons per household for single family dwellings, 3.4 for two family dwellings and 2.2 for multi-family dwellings the existing resident population distribution emerges into perspective. The highest concentration of population is thus observed in the southwestern portion of the city, and the population balance relatively evenly distributed throughout the remaining residential areas. Approximately 89% of the population is housed in single family dwellings, 0.9% in two-family dwellings, and 10.1% in multi-family/townhouse dwellings.

Population density throughout the community is considered low, as revealed in the following Table C:

Table C - Existing Resident Population Densities

- o Population Per Corporate Square Mile: 2,187.3 persons per square mile
- o Population Per Total Urban Developed Acres: 4.5 persons per acre
- o Population Per Developed Residential Acres: 7.3 persons per acre
 - Population per developed single family acres: 10.8 persons per acre
 - Population per developed two family acres: 0.16 persons per acre
 - Population per developed multi-family/townhouse acres: 26.0 persons per acre.

The present resident population is generally distributed as indicated in the following Table D.

Table D - Existing Population Distribution By Planning Areas

<u>Planning Area</u>	<u>Estimated 1976 Population</u>
Area No. 1 - Park Row to Rush Creek & Wagonwheel to West Corporate Limits	527
Area No. 2 - Rush Creek to Spur 303 & Rush Creek to West Corporate Limits	301

- Decreasing trends in household sizes, and declining birth rates;
- Limited available land remaining for residential development;
- Municipal policy maintenance with respect to limiting residential densities, and locations thereof, to that indicated on the Land Use Plan;
- Escalating raw land and development costs (which puts pressures on communities to increase residential density allowances);
- Ability to provide and maintain necessary and desired levels of community facilities and services (i.e., fire and police protection, park and recreation facilities, quality shopping facilities, quality education, and necessary utilities);
- Ability to compete with adjacent communities in establishing and maintaining a quality and unique environment which will attract desired types of housing, business and industry;
- Availability and quality of water supply to satisfy projected needs and demands;
- Favorable municipal taxation rates with respect to the quality and level of municipal services and facilities offered; and
- Whether or not natural or man-made disasters and global conflicts will occur over the planning period.

Several population forecast methods were investigated and considered in arriving at the Town's expected population forecast. The key factor, however, was analyzing existing residential patterns and densities, along with the remaining land available for residential development, and agreed upon density limits of such vacant land. Population saturation would therefore be in the range of 3,600 to 4,600 persons. Population attainment in excess of this range would not be possible unless major land uses and density patterns were changed drastically from that shown on the Future Land Use Plan. The primary question then is when will the community reach its population saturation level.

Given unlimited residential land resources and applying curve projections of the Town's historic growth pattern, a population of approximately 6,800 could be achieved by 1996. This is highly unlikely due to the foregoing reasons.

By analyzing the community's growth trends along with forecasted trends of Arlington and Tarrant County, it is expected that the Town's peak population will be attained somewhere in the 1985 to 1990 period, followed by a leveling off (and even a slight decline due to diminishing household size trends, which acutely affect single family dwelling units). Table E reflects the expected population of Pantego, by 5-year increments, along with that of Arlington and Tarrant County.

Table E - Future Population Forecasts

	<u>1970 d/</u>	<u>1976</u>	<u>1981</u>	<u>1986</u>	<u>1991</u>	<u>1996</u>
Pantego <u>a/</u>	1,812	2,406	2,950	3,400	3,625	3,600
Arlington <u>b/</u>	90,643	135,031	175,000	220,000	260,000	300,000
Tarrant County <u>c/</u>	716,317	790,800	850,000	895,000	940,000	1,000,000

a/ - Forecasts by Carter & Burgess, Inc.

b/ - Forecasts by City of Arlington, Texas

c/ - Forecasts by North Central Texas Council of Governments

d/ - U. S. Census of Population - 1970.

B. Future Population Distribution. Based on the population forecasts, Land Use Plan, and housing needs (described elsewhere in this report) the future population can be expected to be distributed as indicated in Table F.

Table F - Future Population Distribution

<u>Micro-Neighborhood Area</u>	<u>No. of Persons</u>	
	<u>1996</u>	<u>Increase (1976-1996)</u>
Area No. 1 - Park Row to Rush Creek & Wagonwheel to West Corp. Limits	602	+ 75
Area No. 2 - Rush Creek to Spur 303 & Rush Creek to West Corp. Limits	603	+ 302
Area No. 3 - Park Row to Smithbarry/Rush Creek & Wagonwheel to Bowen Road	1,690	+ 274
Area No. 4 - Smithbarry Rd. to Spur 303 & Rush Creek to Bowen Road	398	+ 297
Area No. 5 - Spur 303 to TESCO Esm't. & West Corp. Limits to Bowen Road	0	- 7
Area No. 6 - TESCO Esm't. to So. Corp. Limits & Bowen Road to East Corp. Limits	86	+ 59
Area No. 7 - East Park Row (North-South) (Bowen Road to East Corp. Limits)	<u>221</u>	<u>+ 189</u>
Total	3,600	+ 1,194

COMMUNITY GOALS, OBJECTIVES AND STRATEGIES

COMMUNITY GOALS, OBJECTIVES AND STRATEGIES

TOWN OF PANTEGO, TEXAS COMPREHENSIVE PLAN REPORT NO. 1

The establishment of goals and objectives for the community is a critical requirement for the guidance of planning and development activities. The purpose therefor is to define a consistent statement of community goals and objectives that will result in unity of purpose, a more efficient application of policies and programs, and overall guidance for community development (including private and public activity). Goals and objectives provide direction and guidelines for planning, towards assisting the community in achieving an attractive environment conducive to sound residential, commercial, industrial and community facility growth and development. Any effort to plan ahead without first establishing a set of basic goals and objectives is often little more than an exercise in futility. An attempt to establish goals, objectives and public policies without taking into consideration their feasibility and attainability would be even more futile.

1. GENERAL GOALS

There are numerous goals of a general nature which the community should endeavor to attain. While this planning document is concerned with the more specific goals and objectives, a brief description of the general goals and the contributions which planning can make toward the attainment of these goals is presented first. Such goals provide the basis for more specific goals, objectives and strategies which follow.

A. Community Development Goals

1. The attainment of a sense of civic pride and interest in community growth, development and fiscal management.
2. The establishment and maintenance of programs and policies aimed towards community identity and beautification.
3. The elimination of substandard building conditions, and conservation of established residential and non-residential areas of the community.
4. The promotion and encouragement of orderly and well-planned development in the undeveloped sections of the community, including the urban "fringe" areas.
5. The development, within the framework of existing and projected financial capabilities, of a desired network of public improvements, community facilities and public utilities designed to maintain a favorable posture for private investment and quality development.

6. The encouragement of development in the community that will increase its tax base, promote sales tax revenues, and reduce individual tax burdens, particularly on residential properties.
7. The attainment of a socially compatible community, coupled with a viable economic base to attain regional identity and self-dependence.
8. Provide the framework for accommodating emerging and future trends in varying types of residential developments, housing variety and density in response to social and economic needs of the citizens.

B. Environmental Goals

1. The attainment of conditions of safety throughout the urban area through improved urban design of streets, and a well trained and equipped police and fire department.
2. The attainment of conditions conducive to good health throughout the urban area, by building setback requirements, adequate lot sizes, proper sanitation installation to and within buildings, and "clean" non-polluting industrial attraction.
3. The attainment of desirable environment throughout the urban area.

The community is concerned with what its people see, hear and smell; however, emphasis is also placed on other desirable amenities as various socioeconomic and psychological values emerge. Since planning deals with the physical and functional distribution of various land uses within the urban area, its contribution towards a more attractive area can be substantial.

4. The attainment of the optimum use of the natural resources of the urban area.

The natural landscape of the community contains elements of opportunity and restraint. Because of this, relating all future development to the landscape can affect public and private economies, contribute to the area's appearance and prevent unsafe conditions.

5. The attainment of an optimum utilization of all the cultural assets available throughout the urban area.

The cultural opportunities made available to the population play an important part in their everyday lives by affording the opportunity to utilize free time in a wholesome, constructive and beneficial manner.

6. The attainment of an optimum relationship between development of land and provision of adequate public facilities.

Both efficiency and livability are provided when physical development (largely private) and public facilities and services are balanced. Thus, residential development must be considered in relationship to utilities, parks, schools, streets and other services and amenities.

7. The attainment of an optimum interrelationship among various land uses throughout the urban area.

This is one of the most important potentials of a well-planned community as incompatible or noxious uses can and should be separated in an attractive and efficient manner, thereby removing one of the major causes of blight, decay and pollution.

C. Social Goals

1. The attainment of an optimum range of opportunities for all residents of the community.

The community should provide ample opportunities for the personal development of its citizens, commensurate with its resources. The citizens of the community include persons with differing abilities, tastes, ages and aspirations. The opportunities afforded them should reflect a rational choice in housing, recreation and employment, in both the public and private sectors of the local economy.

2. The attainment of a range of choice for all residents of the urban area.

The range of choice and opportunity should be sufficiently wide to permit the individual to decide among alternatives. Thus, the community should provide a choice in regard to employment, recreation, housing, etc. Planning identifies facilities required to provide the needed choice and flexibility in developmental regulations, to encourage the provision of a greater variety of opportunities and facilities.

D. Economic Goals

1. The attainment of a growing and more diversified economy.

Citizens of the community are interested in economically-controlled growth and population expansion. Therefore, at least some additional economic diversification in the economy is desired, whereby employment opportunities are more assured and commuting time and distance reduced.

Also, such diversification is desired for providing a more stable tax base. Given continued increases in "public overhead" costs, the community should take proper steps to enlarge its tax base. Planning can advance this goal by providing a greater variety of locations and environments for various economic activities. Planning also seeks to improve the tax base indirectly by encouraging higher quality and more functional physical development, and more directly by promoting conditions which should make the community attractive to outside economic interests and enterprises.

E. Political Goals

1. The attainment of workable relationships with state and federal governments and regional planning agencies.

The growing complexity of governmental activities requires a close relationship between local, state and federal governments. This is especially true in the economic sphere. Workable arrangements between the various levels of government often require the kind of firm local development decisions which are normally embodied in a Comprehensive Plan. Coordination with area planning agencies such as the North Central Texas Council of Governments (NCTCOG), Tarrant County and Cities of Arlington and Dalworthington Gardens provides an additional means of assistance towards goals implementation.

2. The attainment of enhanced stature of the community.

Pride in the community is important to most citizens. The reputation of one community among others is one test of its stature. By encouraging a better and distinctive physical image, planning can contribute immeasurably to the community's present and future stature and reputation.

II. SPECIFIC GOALS AND OBJECTIVES

Using the aforementioned general goals as a foundation, it is now possible to outline the specific, or functional, goals and objectives of the community as they relate to specific planning functions. These suggested goals and objectives provide the basis for the formulation of plan elements and the plan implementation procedure and were discussed in general terms with the Council, Planning and Zoning Commission and Citizens Advisory Committee at a joint meeting. Hence, they are organized around the functional elements of community planning and development and include measurable terms of time and space where appropriate. Further refinements and considerations should be given to these goals, by the community, so as to achieve desired objectives.

A. Residential

The specific goal is to provide for a living environment which is safe, healthful, stable and pleasant. Through the application of planning and design standards outlined elsewhere in this report, the attainable and measurable objectives designed to achieve the goal are as follows:

1. That an adequate quantity of new, good quality housing be provided to accommodate the anticipated population growth through 1996. The housing market should offer ample freedom of choice in housing densities, commensurate with fair market price ranges.
2. That residential density patterns be guided by considerations of topography, vegetative cover, adjacent land use, and access to local and area-wide service facilities and circulation routes.
3. That a proper range of densities be provided to accommodate the various types of residential uses required for different age groups, family sizes and life style preferences (i.e., low, moderate and medium densities), with low density being the desired preference of community character.
4. That necessary services such as parks and community facilities be provided in locations which will serve a maximum number of residents in an efficient and safe manner. Residential growth patterns should remain within the capacity of the city to provide additional public facilities and services as they are needed. "Filling-in" of vacant residential lots should give precedent to mass new developments, so as to reduce public service costs.
5. That all substandard housing be eliminated and deteriorating housing rehabilitated. Conserving established neighborhoods should be encouraged through activities of adoption and enforcement of a minimum standards housing code, citizens information programs, clean-up fix-up campaigns, and home and lawn of the month recognition awards.
6. That home ownership, rather than rental occupancy, of single family dwellings be promoted and encouraged throughout the community.

B. Commercial

The specific goal is to provide the necessary commercial establishments in the community to adequately serve the needs of the area's consumers. The functional objectives are as follows:

1. That commercial facilities be compatible in use and character to the area they are to serve.
2. That "strip" commercial activities be controlled in intensity and type so as to maintain traffic safety and efficient circulation along arterial streets.
3. That small local business areas be provided to serve neighborhood needs for convenience goods and services in appropriate locations to encourage walking rather than vehicular access.
4. That vacant dilapidated commercial buildings be removed within a 3 year period, beginning in 1977.
5. That the community maximize, consistent with sound and modern development techniques, the opportunity for business growth by providing appropriate areas for local shopping, community shopping and general commercial uses, via proper zoning ordinance enforcement.

C. Industrial Development

The specific goal is to harmonize existing and proposed industrial development with the community as a whole. The specific objectives are as follows:

1. That screening and "buffers" be provided to protect values of dissimilar adjacent land use areas where necessary. This should be required at the time of site plan review for zoning and development. Existing problem areas should be given attention by the community during the 1977-1978 period.
2. That the community and area industries work together to provide a balanced area economy.
3. That adequate access routes to industrial sites be provided and internal circulation routes be of sufficient design to accommodate expected traffic volumes.
4. That adequate utilities to service industrial sites be provided.
5. That industrial development be concentrated south of Spur 303 to aid the city in realizing its industrial potential without sacrificing other community objectives or pre-empting desirable industrial sites with vast commercial mixing.
6. That industrial uses attracted would not materially contribute pollutants to the community or surrounding area.

7. That a citizens committee be formed in 1976 to promote, seek and attract industrial activities which would complement the community's labor force; provide high paying jobs; and be consistent with other community goals.

D. Cultural and Recreation

The specific, or functional, goal is to provide recreational, cultural and religious facilities necessary to serve the entire community. The functional objectives are as follows:

1. That parks and recreation necessary to serve all residents in the community be provided.
2. The public education continue to be provided through the Arlington Independent School District for Pantego residents. Long range planning of the school district does not anticipate the establishment of primary or secondary schools in the Town. The Town should, however, seek to maintain representation on the school board, and focus attention on quality teaching instruction and curriculum offered.
3. That the establishment of church facilities in the Town should be along either a primary or secondary arterial street to enable proper traffic flow and access. Considerations for site locations should be given to non-residential properties so as to maximize joint parking usage, and minimize high residential development concentrations of activities and population impacts to low density.
4. That the development of a community level park system be comprehensive in terms of uses and include community centers.
5. That the recreational potential of major wooded areas, flood plain land and other desirable natural topographic features be utilized for park and recreation use.
6. That the location of semi-historical sites such as the old cemetery at the southeast corner of Nora Dr. and Country Club Dr., be preserved. This goal attainment should be considered for the 1978-1979 period.
7. That park and recreation areas be designed to include a wide range of activities for persons of all ages within the community.
8. That acquisition of additional park lands be achieved in advance of, or in conjunction with, adjacent private land development. Such activities are programmed for the 1978-1981 period.

9. That federal and local financial resources be utilized in the acquisition and development of park lands, as well as through dedications and easements from subdividers. Financial resources should include such existing federal program assistance as: the Federal Bureau of Outdoor Recreation (BOR) administered through the State of Texas Department of Parks and Wildlife; and the Department of Housing and Urban Development through the Community Development Act (CDA), administered by Tarrant County's Department of Planning and Management. Municipal fiscal budgeting for park development and maintenance should also be utilized.
10. That acquisition and development of a 14.7 acre + tract of flood plain land along the creek between Smithbarry Road and Spur 303 be achieved through the 50-50 matching B.O.R. program.
11. That a small 1-acre flood plain site adjacent to the south of the cemetery along Nora Drive be acquired through CDA funds for use as a mini-nature center. Extensive tree cover, underbrush and topography enhances its value for such usage. Programming should be considered during 1978 or 1979.
12. That a community cultural/recreation center be located in the proposed flood plain park land (south of Smithbarry Road) to provide a wide range of citizens activities. Music, dance, drama, arts and crafts, indoor recreation and social meeting rooms for various community activities are but a few of its possible uses. Such a facility is programmed for the 1990-1996 period.
13. That a 6.7 acre + playfield park located north of Smithbarry Road and west of Oakhurst, be acquired during the 1980-81 period, with development scheduled during the 1983-1985 period. BOR and local funds should be utilized.

E. Circulation

The specific or functional goal is to provide a safe, economical and efficient pedestrian and traffic circulation system. The specific objectives are as follows:

1. That street and highway systems serving the community be designed, refined and maintained to provide safe uncongested circulation systems and minimize mixing of residential/commercial traffic.
2. That the community work closely with the Texas Highway Department to realize a tree and landscape planting program in the median section of Spur 303, to achieve a pleasing and aesthetic appearance as well as community identity. Such investigation and negotiations are programmed for 1977 with budgeting scheduled for 1978 and landscape improvements designated to begin in 1979 through 1980.

3. That the community and Highway Department work closely together to complete the present Park Row Street improvements, from Bowen Road east, by 1976-1977.
4. That the aforescribed entities in item 3 above, plus the City of Arlington, further cooperate to widen and improve Park Row and related drainage, from Bowen Road west. Such a program should begin in 1977 with completion scheduled for 1982, so as to relieve traffic congestion and improve safety.
5. That the community undertake a program to widen and improve Smithbarry Road from Bowen Road to the west line of the existing Bicentennial Mini-Park. Right-of-way negotiations should be considered during the 1978-1979 period with financial arrangements for construction resolved shortly thereafter. Improvements should begin around 1980-1981. Special assessments and bond monies should be considered to achieve this goal.
6. That the community undertake a program to widen and improve Nora Drive, in the same manner as goal No. 6 above. Right-of-way negotiations should be considered during the 1979-1980 period, financial arrangements for construction resolved in 1980-1981, and improvements installed beginning in 1982-83.
7. That the community undertake a program of improving hazardous intersections such as found at Wagonwheel with Smithbarry Road, Wagonwheel with Park Row, Nora Drive with Peachtree, Bowen Road with Spur 303 (in cooperation with the Cities of Arlington and Dalworthington Gardens), Nora Drive with Smithbarry Road (at the time goal No. 5 or 6 is undertaken), and Peachtree with Hilltop Lane. Timing and priorities of these improvement goals should be based on historic records of the nature and volume of traffic accidents; with improvement funding through fiscal budgeting and state/federal monies.
8. That improved pedestrian crossings at Bowen Road and Winewood, Bowen Road and Smithbarry/Tucker Street, and Nora Drive with Park Row be made to achieve a higher degree of safety to students attending Bailey Jr. High, Hill Elementary and Duff Elementary schools. Cooperation with the City of Arlington should be sought to achieve this goal. As traffic volumes on Park Row and Bowen Road continue to increase at an alarming rate early considerations and solutions to the problem are a must. The 1977 through 1980 period is programmed to achieve a workable solution to this goal.

9. That streets emanating from Spur 303 not be allowed to penetrate the residential area north of the TESCO power easement, so as to: eliminate the mixing of residential/commercial traffic; maintain a secluded residential area; and minimize possible incidents of crime penetration into the area from Spur 303.
10. That no vehicular access from Spur 303 to the proposed flood plain park (between Spur 303 and Smithbarry Road) be allowed, in order to maintain the parklands for community use rather than being accessible by the traveling/general public for regional use.
11. That no east-west street be allowed to cross the proposed flood plain park so as to confine higher density residential and commercial traffic to the west of said park and maintain the low density character of single family development east of the parkland.
12. That Bowen Road (between Spur 303 and Arkansas Lane) be widened to 4 lanes of traffic. Cooperation between the Cities of Arlington and Dalworthington Gardens will be required to achieve this goal. Right-of-way negotiations and areas of responsibility should begin during the 1982-1983 period, financial arrangements for construction resolved during 1985, and improvements installed during 1986-1990.
13. That landscaped pedestrian linkages be provided along residential streets in select locations, to connect micro-neighborhoods with schools, parklands and shopping. Such linkages should consist of tree lined sidewalks on at least one side of the street to provide shade and pedestrian/ bicycle routes. The locations of the route linkages should be in conformance with the Land Use Master Plan. Fiscal budgeting should be the financial source considered, and planning and programming begun during the 1979-1980 period. Improvements should be continued throughout the 1981-1986 time period.

F. Sewer, Water and Drainage Facilities and Utilities

The specific, or functional, goal is to provide adequate sewer, water and drainage facilities to all parts of the community as their development potential is realized. The specific objectives are as follows:

1. That sanitary sewers, public water supplies and storm drainage facilities be provided to all areas where the needs presently exist or will exist during the planning period. Special concern should be given to the area between Smithbarry Road and Spur 303.

2. That a high level of public health and safety be assured and maintained in the development of said facilities.
3. That the community's natural resources be protected through balanced and directed growth by properly administering zoning and subdivision regulations.
4. That the Pantego Branch of Rush Creek be preserved and protected to enhance natural drainage; and combined with bike and hike linkages to adequately utilize the open space as a nonvehicular means of access to shopping and community facilities. The creek drainageway should also be used as a land use separator, or buffer, from higher density development to the west and south.
5. All utilities should be located underground where feasible in order to preserve the natural beauty and character of the landscape as well as provide protection from adverse weather conditions.
6. That new housing be prohibited from locating within the 100-year flood plain of the Pantego Branch of Rush Creek.
7. That the existing water distribution system be identified, mapped and kept up-to-date on an annual basis. This goal should be realized during the 1976-1977 time period.
8. That the existing sanitary sewer system map be revised annually to reflect new additions and changes.
9. That new and alternate sources of water supply be investigated, analyzed and determined so as to assure the community of an adequate source and quality of water supply. Work on this goal should be programmed during the 1976-1977 time period. Water pressure needs should also be considered.
10. That a positive storm drainage program be developed in the central portion of the community (along Peachtree Street) in order to relieve adverse effects from periodic flooding to homes. Work on planning and financing should begin during the 1981-1982 period with improvements installed during the 1983-1986 time period.
11. That a definitive program for minimizing damages to adjacent lands and development from a 100-year storm frequency along the Pantego Branch of Rush Creek be developed. Considerations should be given to straightening and widening of the drainage course, and embankment stabilization to reduce soil erosion from normal flows. Planning and programming should begin during the 1976-1977 time period with possible improvements scheduled for 1976-1980.

12. That sewer and water extensions to all new developments be in accordance with Town policies and related cost sharing agreements. It is programmed that such policies be re-examined and analyzed for possible refinements during the 1977-1978 time period.

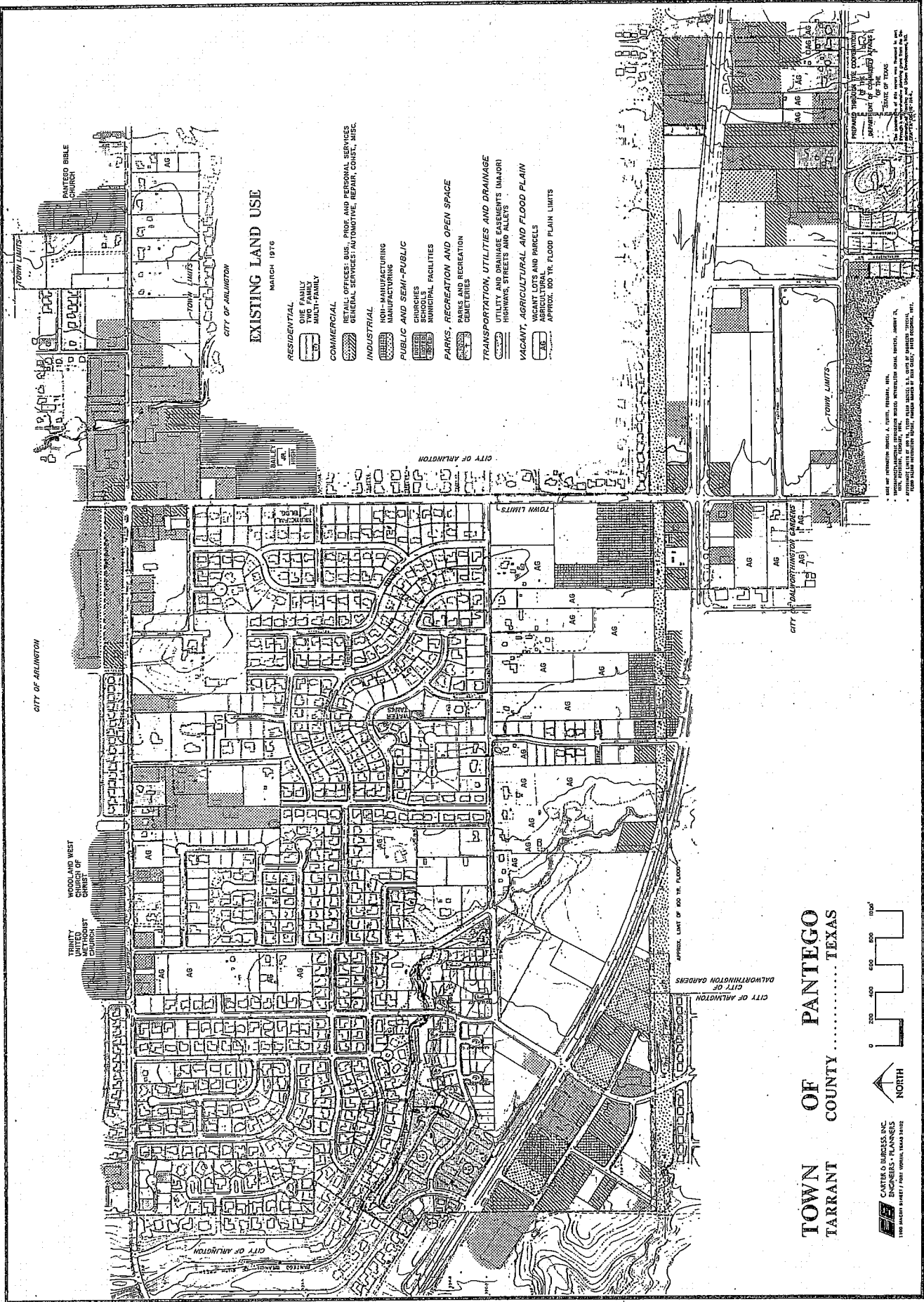
G Governmental and Public Services

The specific, or functional, goal is to provide for adequate, efficient, and economical delivery of public services to all parts of the community, and to promote sound governmental organization which reflects equitable representation and is responsive to the desires of the population. The specific objectives are as follows:

1. That major governmental buildings and facilities be of sufficient size to assure adequate support and necessities for the delivery of governmental service requirements.
2. That an adequate and coordinated system of public safety services and facilities, including police and fire, be assured in order to satisfy the population's needs through 1996.
3. That cooperation and coordination between various branches and agencies of adjacent local governments, as well as county and state governments, along with the North Central Texas Council of Governments, be promoted and maintained. Such coordination should be vested in the Mayor's office to assure continuity and "peer" group relationships.
4. That citizen participation in the governmental processes be encouraged through formal and informal participation efforts and activities such as "town hall" meetings held at least twice a year.
5. That the City Council maintain and retain a competent and properly trained administrative staff to aid in administering and enforcing municipal codes and ordinances so as to assist the Council in insuring desirable and proper urban development.
6. That the Planning and Zoning Commission meet jointly, no less than quarterly, to discuss matters of urban development and capital improvements planning and programming.
7. That the Town Council and Planning and Zoning Commission begin the formulation of a short and long range Capital Improvements program, and present same to the Citizens Advisory Committee for input and testing prior to holding a "town hall" meeting thereon. Such activities should begin during the 1977-1978 time period.

8. The Town's zoning ordinance should be revised and updated to remove "pyramid" use clauses, require site and development plan approvals, include sign control regulations, development performance standards, and screening and landscape requirements. Work on this goal should begin during the 1977-1978 time period.
9. That the Town acquire approximately an additional acre of land adjacent to the west of the present water storage tank, located east of Bowen and north of Spur 303. Such land should be used for materials storage and a maintenance garage to house and repair vehicles and equipment necessary for the maintenance of fire, police, sewer, water and parks facilities. With escalating land costs, budgeting for acquisition should begin in 1978 with the development of a maintenance building scheduled for 1982 or later. Use of the adjacent TESCO power easement could, perhaps, also be utilized for parking and open screened storage adjacent to the site.
10. That the Town Council and Planning and Zoning Commission review restrictive deed covenants on all proposed new subdivisions to assure quality development and consistency with community goals and objectives.
11. That library and public health care services and facilities be provided by the City of Arlington, rather than by the Town. However, the Town should actively monitor and support the proper and adequate delivery of such services which benefit the local residents.
12. That the Town's base map and existing land use map be kept up-to-date on an annual basis to maintain a current record of platting and land use absorption patterns.
13. That a tax ownership map be prepared in order to aid the administrative staff in carrying out its duties, with respect to tax records and assessments.

LAND USE



EXISTING LAND USE

MARCH 1976

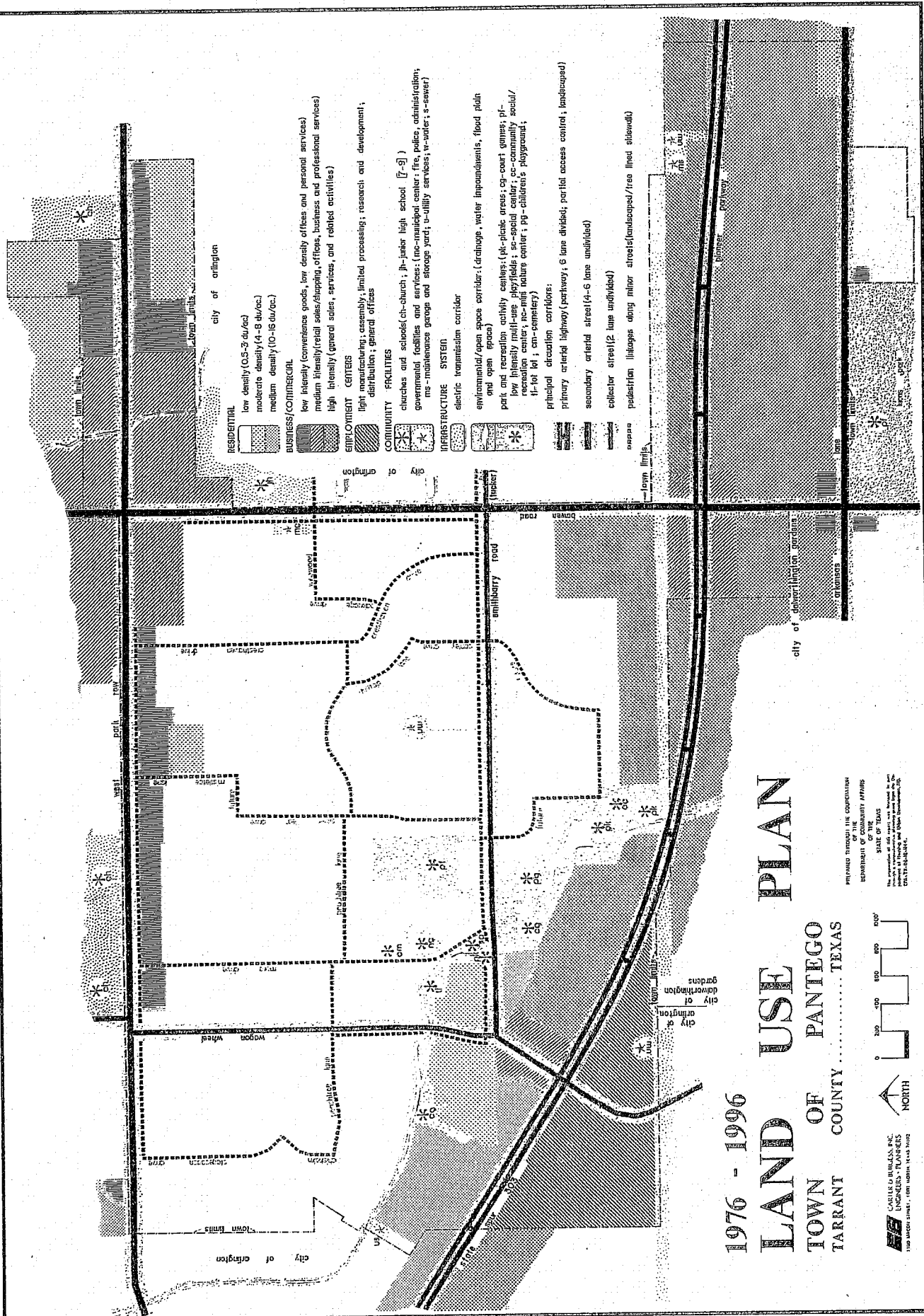
- RESIDENTIAL**
 - ONE FAMILY
 - MULTI-FAMILY
- COMMERCIAL**
 - RETAIL OFFICES, BUS., PROF. AND PERSONAL SERVICES
 - GENERAL SERVICES, AUTOMOTIVE, REPAIR, CONST., MISC.
- INDUSTRIAL**
 - NON-MANUFACTURING
 - MANUFACTURING
- PUBLIC AND SEMI-PUBLIC**
 - CHURCHES
 - SCHOOLS
 - MUNICIPAL FACILITIES
- PARKS, RECREATION AND OPEN SPACE**
 - PARKS AND RECREATION
 - GENETRIES
- TRANSPORTATION, UTILITIES AND DRAINAGE**
 - UTILITY AND DRAINAGE EASEMENTS (MAJOR)
 - HIGHWAYS, STREETS AND ALLEYS
- VACANT, AGRICULTURAL AND FLOOD PLAIN**
 - AGRICULTURE
 - AGRICULTURAL USES AND BARRELS
 - APPROX. 100 TR. FLOOD PLAIN LIMITS

TOWN OF PANTEGO
TARRANT COUNTY, TEXAS



CARTERS SURVEYS, INC.
 1700 MARKET STREET / FORT WORTH, TEXAS 76102

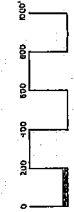
DATE OF PREPARATION: MARCH 1, 1976. PREPARED BY: MRS. A. L. CARTER, FORT WORTH, TEXAS.
 TITLE: EXISTING LAND USE ZONING MAP. THIS MAP IS A REPRODUCTION OF THE ORIGINAL ZONING MAP OF THE TOWN OF PANTEGO, TEXAS, AS AMENDED BY THE TARRANT COUNTY COMMISSIONERS COURT, FORT WORTH, TEXAS, AND THE TARRANT COUNTY CLERK, FORT WORTH, TEXAS, ON MARCH 1, 1976.
 PREPARED UNDER THE SUPERVISION OF THE TARRANT COUNTY COMMISSIONERS COURT, FORT WORTH, TEXAS.



- RESIDENTIAL**
 - low density (0.5-3 du/ac)
 - moderate density (4-8 du/ac)
 - medium density (10-16 du/ac)
- BUSINESS/CENTRE/CIRCL**
 - low intensity (convenience goods, low density offices and personal services)
 - medium intensity (retail sales/shopping, offices, business and professional services)
 - high intensity (general sales, services and related activities)
- EMPLOYMENT CENTERS**
 - light manufacturing, assembly, limited processing; research and development; distribution; general offices
- COMMUNITY FACILITIES**
 - churches and schools (ch-church; jr-junior high school [7-9])
 - governmental facilities and services (me-municipal center; fire, police, administration)
 - recreation and sports and storage yard; u-utility services; w-water; s-sewer)
- INFRASTRUCTURE SYSTEM**
 - electric transmission corridor
 - environmental/open space corridor; (garbage, water impoundments, flood plain and open space)
 - park and recreation activity centers; (pk-pkic areas; cg-court games; jr-jr park and recreation trail-use; playfields; sc-social center; cc-community school/recreation center; mc-multi nature center; pg-children's playground; ft-ft; cm-cemetery)
 - principal circulation corridors:
 - primary oriented highway (parkway; 6 lane divided; partial access control; landscaped)
 - secondary oriented street (4-6 lane undivided)
 - collector street (2 lane undivided)
 - pedestrian linkages along minor streets (landscaped/tree lined sidewalk)

1976 - 1996
LAND USE PLAN
TOWN OF PANTEGO
TARRANT COUNTY, TEXAS

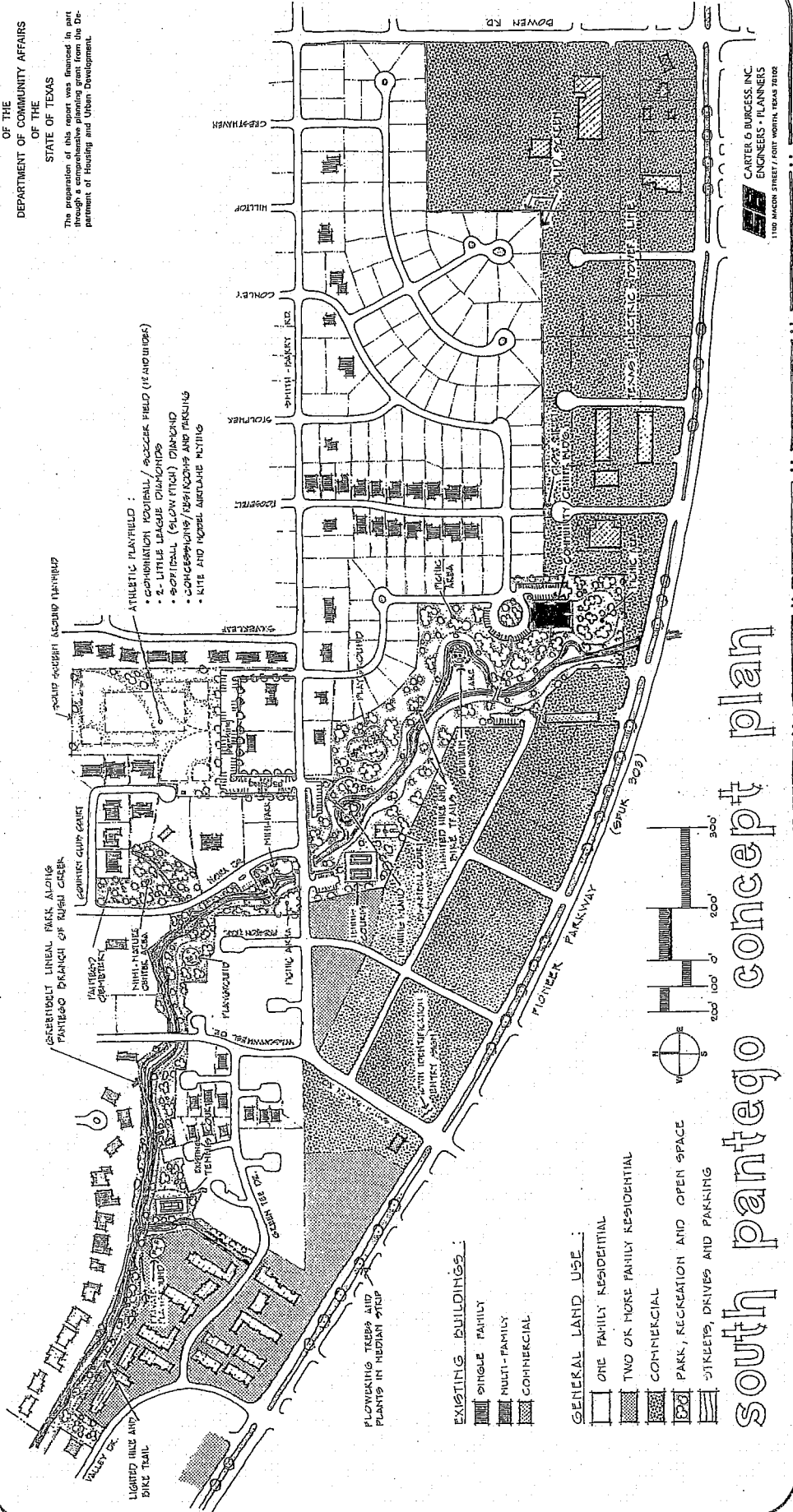
PREPARED THROUGH THE COOPERATION
 OF THE
 DEPARTMENT OF COMMUNITY AFFAIRS
 STATE OF TEXAS
 The preparation of this report was financed in part
 by a grant from the State of Texas, Department of
 Community Affairs and Urban Development, Title
 100-112-3-100-100.



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PREPARED THROUGH THE COOPERATION
OF THE
DEPARTMENT OF COMMUNITY AFFAIRS
OF THE
STATE OF TEXAS

The preparation of this report was financed in part
through a comprehensive planning grant from the De-
partment of Housing and Urban Development.



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ENGINEERS - PLANNERS
1100 MACON STREET / FORT WORTH, TEXAS 76102

south pantego concept plan

EXISTING BUILDINGS:

- SINGLE FAMILY
- MULTI-FAMILY
- COMMERCIAL

GENERAL LAND USE:

- ONE FAMILY RESIDENTIAL
- TWO OR MORE FAMILY RESIDENTIAL
- COMMERCIAL
- PARK, RECREATION AND OPEN SPACE
- STREETS, DRIVES AND PARKING

LAND USE

TOWN OF PANTEGO, TEXAS COMPREHENSIVE PLAN REPORT NO. 1

I. EXISTING LAND USE

The first phase in the development of a Comprehensive Plan for the Town was to conduct a "windshield" survey/inventory of existing land uses found within and immediately adjacent to the Town's corporate boundary. This work element was performed in early March of 1976, and the results identified on a composite base/topographic/culture map of the Town. (See map titled, "Existing Land Use - March 1976.")

The existing land use map information depicts the spatial arrangements, patterns and intensity of land uses found within the community at the time of survey. The value derived from the inventory and mapping serves as an aid to the Planning and Zoning Commission and Council in evaluating and formulating land use policies with respect to zoning requests, text and map changes; land development standards of the subdivision regulations; abatement of previous improper land use decisions; and background data towards the preparation of a future land use plan.

The Town's corporate area was found to contain approximately 682.1 acres (1.1 square miles). Of that total, 537.8 acres (79%) are developed into urban land uses (i.e., residential, commercial, industrial, public and semi-public, and streets), and 143.3 (21%) are in undeveloped acreage (i.e., agriculture and vacant lots and parcels). Table A depicts existing land use quantities and absorption ratios by land use category, as derived from the "Existing Land Use Map." Table B reflects the amount of acreage by land use category which is contained in the 100-year flood plain of the Pantego Branch of Rush Creek. The flood plain limits were obtained from the Fort Worth District Corps of Engineers' 1972 Flood Plain Information Report.

- A. Land Use Analysis. Comparison of the Town's existing land use absorption ratios with other communities in the metroplex of varying population sizes and character reveal some interesting characteristics. The amount of land absorbed by residential and circulation uses, on a per capita basis, is quite similar in 4 of the 6 cities shown on Table C. Only Pantego and Arlington reflect a wider disparity in such land uses due to the low density character of residential development. Public and semi-public land use is much lower in Pantego than in any of the remaining 5 cities, due in part to the absence of schools, churches and lack of sufficient park, recreation and open space. Commercial land use absorption for Pantego is much higher than the remaining 5 cities; however, much of this usage is in service type activities rather than retail sales

activities where the greatest sales tax revenues are obtained. The Town's total absorption ratio can, however, be considered somewhat comparable to 4 of the remaining 5 cities.

Existing land use patterns are well distributed throughout the community and incompatible land uses are minor in nature and number. Flood Plain land area consumes 25.2 acres of the Town, for which 10.7 acres are presently developed in some form of urban land use. Of significant concern are the 9 existing single family dwellings affected by the flood plain. Further, 12 undeveloped single family lots are also within and adversely affected by the flood plain.

- B. Land Resources. Examination of Table A and the "Existing Land Use Map" reveals the amount, location and type of land yet to be consumed into urban uses. Generally, the vacant land south of the Texas Electric Service Company (TESCO) transmission line will be consumed for commercial and industrial activities, as will a portion of the land bounded by Spur 303, Smithbarry Road and the Pantego Branch of Rush Creek. Vacant land between Spur 303 and TESCO power line in the southwest portion of the Town will also be absorbed for the same purpose.

The remaining vacant land north of TESCO power line will, for the most part, be absorbed into residential uses, with low density residential use being the most predominant, interrupted by small pockets of moderate density housing along Park Row Street.

II. PLANNING AND DEVELOPMENT STANDARDS

The following standards are suggested as the means of attaining planning objectives in conformity with community goals, objectives and strategies found elsewhere in this report. Planning and development standards are categorized by the several functional elements of community activity and development, including housing, commercial and industrial areas, various types of community facilities and services, and circulation. These standards define the desired levels of achievement (and in some cases quantities) in the various categories of development and redevelopment. Although the actual satisfaction of these standards likely will vary in relation to cost, priorities and existing conditions, public policy should endeavor to achieve these standards where possible.

- A. Housing. The Town should contain a diversity of residential types and prices in proportion to the social and economic needs of its present and future population. Incompatible uses and activities should be isolated or buffered from residential areas so that housing is not adversely affected by nonresidential activities, nor the latter curtailed because of proximity to housing.

Table A - Existing Land Use Quantities: March 1976

<u>Land Use</u>	<u>Acres</u>	<u>Percent of Developed Acres</u>	<u>Absorption Ratio (developed acres per 100 persons)</u>
<u>RESIDENTIAL</u>	<u>330.8</u>	<u>61.5</u>	<u>13.75</u>
Single Family	197.7	36.8	8.22
Two Family	123.7	23.0	5.14
Multi-Family/Townhouse	9.4	1.7	0.39
<u>COMMERCIAL</u>	<u>77.6</u>	<u>14.4</u>	<u>3.22</u>
Retail, Office, Business & Prof. Suc's.	49.9	9.3	2.07
General Services (auto, repair, const.)	27.7	5.1	1.15
<u>INDUSTRIAL</u>	<u>20.6</u>	<u>3.8</u>	<u>0.86</u>
Non-Manufacturing	12.9	2.4	0.54
Manufacturing	7.7	1.4	0.32
<u>PUBLIC & SEMI-PUBLIC</u>	<u>19.2</u>	<u>3.6</u>	<u>0.80</u>
Churches and Schools	-0-	-0-	-0-
Park, Recreation & Open Space:	1.6	0.3	0.07
Parks	(1.1)	-	-
Cemetery	(0.5)	-	-
Major Drainage & Utility Easmt's.	15.7	2.9	0.65
Municipal Facilities	1.9	0.4	0.08
<u>CIRCULATION</u>	<u>89.6</u>	<u>16.7</u>	<u>3.72</u>
State Highway	26.8	5.0	1.11
Local Streets	62.8	11.7	2.61
<u>TOTAL DEVELOPED ACRES:</u>	<u>537.8 (79%)</u>	<u>100%</u>	<u>22.35</u>
<u>TOTAL UNDEVELOPED ACRES:</u>	<u>144.3 (21%)</u>		
Agriculture	59.1 (11.0%)		
Vacant Lots and Parcels	85.2 (10.0%)		
<u>GRAND TOTAL ACRES:</u>	<u>682.1 (100%)</u>		

Table B - Existing Land Use Within Rush Creek's 100-Year Flood Plain

<u>Land Use</u>	<u>Acres</u>
<u>RESIDENTIAL</u>	<u>3.5</u>
Single Family	1.4
Multi-Family	2.1
<u>COMMERCIAL</u>	<u>1.1</u>
General Services (auto, repair, const.)	1.1
<u>PUBLIC AND SEMI-PUBLIC</u>	<u>4.0</u>
Parks and Recreation	1.1
Utility & Drainage Easements	2.8
Municipal Facilities	0.1
<u>CIRCULATION</u>	<u>2.1</u>
Local Streets	2.1
<u>TOTAL DEVELOPED ACRES</u>	<u>10.7</u>
<u>TOTAL UNDEVELOPED ACRES</u>	<u>14.5</u>
Agriculture	5.9
Vacant Lots and Parcels	8.6
<u>GRAND TOTAL ACRES</u>	<u>25.2</u>

Table C - Land Use Absorption Ratios

Comparison of Selected Cities
(Developed Acres Per 100 Persons)

<u>Land Use</u>	(1976) <u>Pantego</u>	(1971) <u>Arlington</u>	(1968) <u>Grapevine</u>	(1965) <u>Grand Prairie</u>	(1970) <u>Bedford</u>	(1973) <u>Southlake</u>
RESIDENTIAL	13.75	6.34	8.58	5.38	7.53	17.2
COMMERCIAL	3.22	1.64	1.16	1.13	0.32	2.3
INDUSTRIAL	0.86	0.79	1.03	0.47	-0-	2.7
PUBLIC/SEMI-PUBLIC	0.80	2.51	9.20	3.55	1.18	3.1
STREETS	<u>3.72</u>	<u>3.39</u>	<u>9.72</u>	<u>5.21</u>	<u>7.48</u>	<u>18.6</u>
	22.35	14.67	22.65	15.74	16.51	43.9
Population:	2,406	90,643	7,023	40,600	10,049	2,465

Source: Comprehensive Planning Report of the Above Cities

Essential facilities and services should be provided for neighborhoods such as easy access to arterial and collector streets, open space for leisure time activities, fire and police protection and basic utilities. The use of septic tanks should be prohibited and all development should be connected to the public sanitary sewer system.

Housing should be developed only in areas that have soils of a consistency suitable for foundation support and the installation of underground public utilities. Similarly, areas subject to ponding or flooding should not be developed for housing purposes unless suitable downstream drainage or upstream protection is provided in advance of development. Areas with unusual topographic features or significant vegetative cover should be subject to development only if individual lot grading can be minimized and the natural character of the area preserved. "Leap-frog" development should be discouraged so that maximum economy and efficient balanced densities can be derived, and energy and utility extension costs reduced.

The practical application of density standards to achieve the patterns and arrangements designated on the "Future Land Use Plan" are based on the following criteria, and closely parallel existing development densities.

1. Low Density Residential: 3 dwelling units per gross acre - maximum, with the optimum range at about 2.6 dwelling units per gross acre. This density is designed to accommodate conventional detached single family dwellings on lot sizes between 9,600 and 13,000 square feet, with 80-100 foot lot widths and 120-130 foot lot depths. Gross density refers to the net area of the residential lot plus one-half of adjoining streets, but not including non-residential or major open space land areas.
2. Moderate Density Residential: 4-8 dwelling units per gross acre - maximum, with the optimum range between 5.6 and 6 dwelling units per gross acre. This density is designed to accommodate various forms of single family detached cluster dwellings, two-family dwellings and low density townhouse developments. Gross density for one and two-family dwellings means the same as that referred to in paragraph 1. above. Townhouse gross density is similar except that related open space uses are included. Low density townhouse development should not contain more than 4 units per building.
3. Medium Density Residential: 10-16 dwelling units per gross acre - maximum, with the optimum range between 12-14 dwelling units per gross acre. This density is designed to accommodate low density garden apartments

at approximately 14 units per acre, as well as higher density townhouse units not exceeding 10-12 units per acre. New townhouse buildings should not contain over 6 units per building, and garden apartment buildings should not contain more than 10-12 units per building. Gross density for medium density residential uses shall include the land devoted to residential buildings, related open space and project amenities (i.e., swimming pools, social/recreation buildings, laundry facilities, management office, etc.), private drives and parking areas, and one-half of adjacent streets.

Landscaping and screening should be required for all moderate and medium density residential development projects. Zoning ordinance standards reflecting these density patterns should be refined and enforced. The "Planned Unit Development" criteria of the zoning ordinance should not be allowed as a tool merely to increase overall densities or introduce undesirable land uses in residential development projects which do not conform with the land use plan.

- B. Commercial Areas. In more recent years of community development, the former concept of spot commercial zones and strip or ribbon commercial development has given way to newer and better conceived types of clustered and more compact commercial development. Likewise, it has been found undesirable and often times unnecessary to promote commercial development at each major intersection due to reasons of traffic congestion and pedestrian/vehicular conflicts. The recurring adverse effects of isolated commercial uses on surrounding residential properties, traffic friction and other hazards created by strip development and congestion at major intersections have influenced city plans and ordinances to encourage the clustering or grouping of such activities into better planned commercial centers. These centers employ adequate (and landscaped) parking areas, provide easy access from the roadway network into the center without choking the street intersection and other amenities of safety, convenience and aesthetics. These new approaches benefit the merchants as much as the consumer and town. Likewise, commercial uses and activities should be separated from residential uses by solid screening or dense landscape evergreen plantings. Stratification of more intense to less intense commercial activities should prevail as they become closer to existing or new low density residential areas.

The "Future Land Use Plan" envisions 3 general types of commercial areas: low intensity, medium intensity and high intensity business/commercial. Each of these types has its own set of amenities, purposes and characteristics. Accordingly, each requires its own set of standards.

Low Intensity Business/Commercial. Land uses in this category are generally found along selected intersections of local and collector streets with secondary arterial streets. Most buildings are free standing rather than adjoined. Land space requirements vary according to the population density and income levels served. The primary function is to provide for the daily needs of the consumer which requires somewhat frequent purchase, consumption and services. Activities found in this type of district generally comprise convenience food stores, ice cream and sandwich shops, day care nurseries, barber and beauty shops, low density office uses such as for real estate, insurance and accounting, and other similar personal services such as low density medical and dental clinic offices. The nature and low vehicular attraction of these activities make a compatible transition to adjacent residential areas. Screening, landscaping and proper parking area circulation features are important design elements for consideration as well as building height limitations to not more than 25 feet. Lot sizes should not be less than 8,400 square feet per establishment. Service areas are normally between 1/4 and 1 mile radius. Open outdoor storage areas should be prohibited.

Medium Intensity Business/Commercial. Land uses in this category are generally found at the intersections of arterial streets and highways. Buildings are usually a mixture of both detached and attached structures. Community shopping and related services are normally structured around a supermarket, junior department stores as the primary attraction feature and stabilizing anchor. Finance, banking, service stations, business and professional services, restaurants, select retail outlets and some of the uses found in the low intensity commercial districts are the primary elements of a medium intensity district. Such districts normally serve populations of 10,000 and up, and afford convenient and rapid access. Landscape, screening and parking requirements are similar to those of the low intensity districts. The intersections of Bowen Road with Park Row and with Spur 303, plus Smithbarry Road with Spur 303 are the suggested desired locations for this district. Lot sizes should not be less than 6,000 - 7,000 square feet. Open storage areas should be discouraged, but properly screened if such are necessary.

High Intensity Business/Commercial. Land uses in this category are generally found along and either side of Spur 303. Uses are a mixture of detached buildings containing general sales and service activities, such as automotive repair garages, construction yards, wholesaling, warehousing and storage, miscellaneous retail

activities, food and beverage establishments, offices, bottling plants, business services and the like. Such uses normally consume fairly extensive land areas, and are more of a large area or region serving nature of business types. Accessibility to a primary arterial route is important to the daily functions of the uses. Lot sizes should not be less than 10,000 square feet in area. Landscaped setbacks along Spur 303 should be required, to enhance the community image. Building heights should approximate 30 to 35 feet maximum. Open storage areas should be appropriately screened from view.

- C. Employment Centers. Land uses in this category are considered to be those types which afford high levels of employment such as for light manufacturing, assembly, processing, research and development, distribution and general offices. Site areas of 1/2 to 5 acres should be considered for these establishments. Access to a primary arterial street is also important to satisfy the needs of transporting goods and services and for ease of access by employees. Buildings should not exceed 40 feet in height as a rule. Retail commercial activities should be discouraged from pre-empting industrial land in this district so as to avoid land use conflicts and allow ample land space for industrial attraction and use. Ample landscaped building setbacks and screened parking and storage areas should be provided. The area south of Spur 303 on either side of Smithbarry Road is suggested for this district. "Blue Chip" corporations should be sought to locate in this district and attention to the expansion needs of present industries should be given high priority.

D. Circulation.

1. Primary Arterial Streets. Spur 303 is considered in this category. Its function is to carry inter-regional traffic and is controlled and maintained by the State Highway Department. Its access is partially controlled at key intervals, and presently accommodates 4 lanes (2 in each direction) separated by a grass median. 1972 average daily traffic volumes (ADT) along the Pantego route segment approximates 25,000 vehicles, with forecasts of 50,000 vehicles per day expected by 1990, as determined from a 1972 Thoroughfare Development Program Report prepared in 1972 by Wilbur Smith and Associates, Consulting Engineers and Planners, for the City of Arlington. To provide capacity for future needs, the 1990 plan indicates that Spur 303 will need to be widened to 6 lanes (median divided) and, with partial controlled access, even then, will accommodate only 43,000 vehicles per day. Future roadway widening is expected to be contained within the present 130 foot R.O.W. Paving width will be expanded from 50 to 72 feet, and should be accomplished by State and Federal funds, through the State Highway Department, by 1980.

2. Secondary Arterial Streets. Bowen Road, Park Row and Arkansas Lane are the principal roads in this category. They serve both local and through traffic for great distances. Existing and proposed improvement standards are discussed as follows:

a. Bowen Road. Bowen Road presently has a 60 foot R.O.W. with 43 feet of paving. 1972 volumes (ADT) reflected approximately 10,000 vehicles. Traffic demands and standards projected by Wilbur Smith & Associates indicate a 1990 ADT of approximately 15,000+ vehicles with 4 - 12 foot lanes of traffic within a 90 foot R.O.W. Proposed improvements to the segment between Spur 303 and Arkansas Lane should be considered between 1986-1990, according to the Wilbur Smith report.

b. Park Row. This street is presently being widened between the east corporate limits and Bowen Road, to 4 - 12' lanes of traffic within a 70 foot R.O.W. The section from Bowen Road to the Town's west corporate limits should match the eastern section. 1972 ADT counts reflect approximately 11,300 vehicles per day, east of Bowen Road and 9,000-10,000 ADT west of Bowen Road. 1990 ADT projections indicate 30,000 vehicles east of Bowen Road and 20,000 vehicles west of Bowen Road, on an average day. Four 12-foot traffic lanes in approximately 65 to 70 feet of R.O.W. west of Bowen Road should be considered by the City of Arlington. Park Row widening west of Bowen should be achieved before 1982.

c. Arkansas Lane. This street is presently 22 feet in width within a 50-foot R.O.W. 1972 ADT counts reflect a traffic volume of approximately 7,000 to 8,000 vehicles. Future projections indicate 4 - 12 foot divided traffic lanes within an 80-90' R.O.W. will be required to accommodate a projected ADT of approximately 15,000 vehicles a day. Improvements should be considered between 1986-1990.

3. Collector Streets. These streets should include Wagonwheel Drive and Smithbarry Road. Their primary function is to carry traffic from local (minor) streets to the arterial street system. They should contain a sidewalk along at least one side in residential areas for ease of pedestrian movements.

a. Smithbarry Road. Presently, Smithbarry Road has a varying R.O.W. and paving width along its route from Bowen Road to the south corporate limits (south of Spur 303). West of Nora Drive, the paving width approximates 44 feet within a 60-foot R.O.W. East of Nora Drive, the paving width diminishes to 20-22' wide within a 50' R.O.W. The section east of Nora Drive should be widened to a minimum 60 feet of R.O.W. with a paving width of 44 feet, and considered a priority improvement.

- b. Wagonwheel Drive. This street has a 30-foot paving width within a 50-foot R.O.W. (between Park Row and Smithbarry Road). The street will accommodate 2 - 12 foot traffic lanes and 1 - 8' parking lane, which should be sufficient for future traffic needs. Its intersection with Park Row should be improved to provide storage lanes for turning movements, and centerline alignment adjustments with Norwood Drive should also be made so as to increase traffic safety and improve flow characteristics. The intersection of Wagonwheel Drive with Smithbarry should also be improved to facilitate traffic safety and flow characteristics.
- 4. Local Streets. These streets provide the primary means of access to abutting properties, whether for residential or non-residential purposes. Generally, standards for such streets should be as follows; and should further require curb and gutter with sidewalks along at least one side in residential areas and in non-residential areas where pedestrian traffic is expected.
 - a. Residential Serving Streets.
 - 1) Low and moderate density developments: 50' R.O.W. - 30' paving.
 - 2) Medium density developments: 50' R.O.W. - 36' paving.
 - b. Non-Residential Serving Streets.
 - 1) Light intensity business/commercial developments: 50' R.O.W. - 30' paving.
 - 2) Medium and high intensity business/commercial developments: 60' R.O.W. - 40' paving.
 - 3) Employment centers (industrial): 60' R.O.W. - 44 to 48' paving.
- 5. Intersection Improvements. The following list of street intersections will require some degree of improvement (i.e., either channelization, stop sign modifications, signalization, or alignment corrections) over the course of the planning period:
 - a. Wagonwheel with Park Row;
 - b. Wagonwheel with Smithbarry Road;
 - c. Nora Drive with Peachtree;
 - d. Silverleaf with Peachtree;
 - e. Hilltop with Peachtree;
 - f. Winewood with Bowen Road;
 - g. Arkansas Lane with Bowen Road;
 - h. Spur 303 with Bowen Road.

6. Pedestrian Linkages. The streets shown on the Land Use Plan designated as "Pedestrian Linkages" should be extensively tree lined and landscaped with a sidewalk on at least one side. This will provide "bike and hike" routes for linkage with various community facilities, as a means to reduce vehicular dependence and enhance walking and bicycling as a principal mode of intra-community circulation.

7. General Circulation Standards.

- a. Streets serving the commercial area adjacent to the north side of Spur 303 should not be allowed to penetrate into the residential area to the north - so as to prevent mixing of residential and non-residential traffic and attendant problems associated therewith.
- b. East-west streets should not be allowed to traverse the flood plain south of Bowen Road, as an adverse mix of residential and non-residential traffic would result.

E. Park, Recreation and Open Space. General accepted standards for park, recreation and open space use are based on 10 acres per 1,000 population. With a population forecast of 3,600 to 4,000 persons, the total acreage required would approximate 36 to 40 acres. Due to the uniqueness of the community's topography, with the Rush Creek drainageway and flood plain traversing the Town in a southeast-northwest direction, it is recommended the park, recreation and open space system be achieved along the creek corridor. Such a system will serve both as a land use separator and provide for a variety of activities as well as a linkage connector.

The "Land Use Plan" depicts the general spatial location and arrangement of this system, while the "South Pantego Concept Plan" shows the proposed park, recreation and open space uses and activities in greater detail. Flood plain land should, where possible, be utilized for open space use to minimize adverse impacts on other forms of development, minimize drainage costs and impediments to storm drainage and flood waters.

General acreages of various segments of the proposed Rush Creek open space corridor are as follows in Table D.

Table D - Existing and Proposed Park, Recreation and Open Space

City Owned	Acres + Proposed Acquisition	Presently Developed For Park and Recreation Use			Location
		Full	Partial	None	
12.0			X		West of Wagonwheel Drive
1.6	0.3			X	Wagonwheel to Nora Drive
1.0		X			Bicentennial Mini-Park
0.5			X		Cemetery
	0.9			X	Mini-Nature Center
	6.7			X	Playfield (east of Nora Drive and north of Smithbarry Road)
	14.7			X	Between Smithbarry Road and Spur 303
<hr/>	<hr/>				
15.1	22.6	- Subtotal acres			

37.7 Acres + - Total Park, Recreation and Open Space

Restoration of the old cemetery should enhance the attractiveness of the immediate neighborhood and provide a link with the cultural heritage of the community. Land acquisition for park lands should be considered via several means, such as dedication and/or purchase from adjacent subdivision development activities at the time of land platting, Bureau of Outdoor Recreation grant program (50-50 matching funds), general bond issue, or supplemental charges to water customers on monthly billings for land acquisition and development.

F. Community Facilities.

1. Municipal Center. Should the Town decide to provide a full service full time fire department and increase the size and capacity of the police department to accommodate future population and development growth, then additional building space will be required. Such space expansion should be considered to the north end of the existing building, along with attendant parking requirements. Actual building space determinations should be made at the time of consideration. Such additional space needs may be necessary somewhere between 1990-1996. Should the Town elect to dissolve its corporate status and become incorporated with the City of Arlington at some future date, the present building and facilities should be adequate to serve the community and area, as the administrative portion could be converted to police and fire substation use. Land expansion should not be necessary to accommodate future needs. Standards established by the Texas State Board of Insurance should be adhered to in order to assure proper fire flow pressures and other fire protection measures to the community.

2. Maintenance Garage and Storage Facility. It is recommended that an additional acre of land be acquired adjacent to the west line of the present water storage tank, located along the north side of Spur 303 and east of Bowen Road. This would allow sufficient site area, coupled with the water tank site and use of the TESCO easement adjacent to the north, in which to conduct maintenance on municipal vehicles and facilitate an open screened storage area for supplies and materials necessary for streets, parks and utilities maintenance, as well as for storing municipal service vehicles. Building size should be based on future needs for enclosed storage and maintenance requirements. Such a facility would be needed around 1982 or later, and the present storage area adjacent to the municipal building on Bowen Road should be abandoned at that time.
3. Community Indoor Recreation/Social Center. This facility is proposed within the Rush Creek lineal park west of Roosevelt Drive and abutting onto Sarah Drive. Uses and activities to serve the resident population would include music, arts and crafts, social meeting rooms, indoor recreation, scouting activities, park concessions and restrooms. Building design should be of natural materials and colors to harmonize with and complement the natural park setting. Due to the vast number of private swimming pools dispersed throughout the residential areas and Arlington's Woodland West Pool, it is doubtful that a public pool would be necessary unless Arlington's municipal policy regarding non-resident facility users would undergo drastic change. Direct vehicular access for Spur 303 to the Community Center should be prohibited for reasons described elsewhere in this report.
4. Mini-Park Social Center. This one story frame building encompasses approximately 720 square feet of enclosed space. General social meeting space, kitchen and restroom are the chief functional activities housed. Due to site and parking limitations and building scale within the mini-park site it is not recommended to expand this facility. The Town's population growth will require additional building space to satisfy needs and demands, and thus, the aforescribed (paragraph F.,3) Community Center Building would be required.
5. Churches. Churches should be sited on at least 1 - 2 acres of land with landscaped parking areas and direct access to a primary or secondary arterial street. Sites adjacent to shopping facilities could reduce the number of parking spaces required as joint parking usage may be possible. Parking and outdoor recreation facilities should be screened and buffered from any adjacent residential land uses.

6. Schools. None are anticipated in the community due to present and projected plans of the Arlington Independent School District.
7. Library. Adequate library facilities exist within close proximity to the Town, and are provided by the City of Arlington. No new library facilities are anticipated within Pantego over the planning period.

III. FUTURE LAND USE

- A. Land Use Requirements. The land use needs of the future 1996 resident population are tempered by present zoning district boundaries of various types of districts, which the Town Council, Planning and Zoning Commission and Citizens Advisory Committee have determined to be adequate and necessary for future growth. Based upon their assumptions coupled with a land holding capacity analysis, population growth of the community, intra-regional as well as local serving non-residential needs and demands, and the anticipation that the community will utilize its land resources in a more efficient manner within its restricted square mile corporate area, the following Table E reflects the Town's future land use requirements.

Land use requirements reflected in Table E are further discussed in the following analysis:

1. Residential. The existing land use data included cluster homes in the same category with detached conventional single family homes. Future land use requirements consider only the conventional dwellings within the low density category, and shifts the cluster homes in the moderate density category along with duplexes and low density townhouses. Numerous single family and two family dwellings exist on abnormally large lots, which are zoned commercial. These units will most likely be replaced by commercial development in the future - due to location and zoning. Even with the present undeveloped land zoned for residential use, the aforescribed land conversions will materially affect the amount of total net residential land required. Medium density residential land use will show only a slight increase due to present Town policy aimed at home ownership priority.
2. Commercial. The ratio of needed neighborhood serving commercial land use acres to residential land use acres is 1:10. This ratio reflects a need for only 25 acres of neighborhood serving commercial use, however, a larger geographic area than just Pantego is, and will be, served by such uses. Approximately 75 additional commercial acres will be consumed by medium and high density residential uses serving an intra-regional population.

Table E - 1996 General Land Use Requirements

<u>Land Use</u>	<u>Acres</u>	<u>Percent of Developed Acres</u>	<u>Absorption Ratio (developed acres per 100 persons)</u>
RESIDENTIAL	254.3	44.8	7.1
Low Density (2.6-3 du/ac.)	220.4	38.8	6.1
Moderate Density (4-8 du/ac.)	21.5	3.8	0.6
Medium Density (10-16 du/ac.)	12.4	2.2	0.4
COMMERCIAL	100.8	17.7	2.8
INDUSTRIAL	27.0	4.8	0.8
PUBLIC & SEMI-PUBLIC	59.3	10.4	1.6
Parks, Recreation and Open Space	37.7	6.6	1.0
Other Public & Semi-Public	21.6	3.8	0.6
CIRCULATION (Streets & Highways)	<u>126.7</u>	<u>22.3</u>	<u>3.5</u>
TOTAL DEVELOPED LAND	568.1 (83.3%)	100%	15.8
VACANT LAND	<u>114.0 (16.7%)</u>	-	
CORPORATE AREA	682.1 (100%)		

The majority of the vacant land reserve (114 acres +) expected by 1996, will be commercially zoned, if present Town zoning policies are continued, due to the vast amount of "over zoned" commercial tracts within the immediate proximity of the Town, coupled with the near build-out of residential land to the west, north and east. Some of the commercial zoned land may, when housing demands accelerate, be converted to residential uses around 1985-1990.

3. Employment Center. This land use is expected to increase to a need of 8 acres per 1,000 population and will be of the "light" industrial category. Much of this land space will result from conversions from existing commercial uses to industrial activities, which are expected to occur in the future in the area designated as the "employment center" on the Land Use Plan. Care must be taken to discourage commercial uses from pre-empting industrial uses in the remaining vacant industrial zoned land.
 4. Public & Semi-Public. Land use requirements in this category primarily result from park, recreation and open space needs, and other community facilities such as future churches and a municipal maintenance area site.
 5. Circulation. Streets and highways necessary to serve residential and non-residential land use needs will encompass approximately 18.6% of the total corporate area.
- B. Land Use Plan. The Town's indication of intended land uses, residential densities and infrastructure system, on the Land Use Plan, serves at least two major purposes. First, it provides a statement as to the formulation of public policies with respect to zoning, flood plains, and activities of public and quasi-public entities with respect to community growth and development. Second, it guides private actions in informing prospective landowners, developers and individuals as to the intent of the community respecting the spatial arrangement of land uses and densities of urban development, which the Town desires to achieve over an extended time period.

The future Land Use Plan molds the factors discussed above, along with the land use needs derived from Table E - 1996 General Land Use Requirements, into a general policy statement of the community. The plan has built in excess land use quantities with respect to business/commercial activities to allow for flexibility and possible service to the emerging residential area south of Arkansas Lane. The plan should be flexible rather than a static tool - properly adjusted and revised, from time to time, to allow for unforeseen and changing needs and demands. The plan should be examined

closely when zoning changes are contemplated, to assure land use compatibility and density patterns. The plan should, if properly followed and sound zoning policies employed, assure the community of an orderly development pattern, coupled with the efficient delivery of municipal services and facilities. A functional and aesthetically pleasing environment will thus be the desired end result.

Based on the Town's population forecast and residential densities and distribution reflected on the Land Use Plan, the future population density anticipated is depicted as follows:

- o 3,420 persons per square mile
- o 5.3 persons per acre (total corporate area)
- o 6.3 persons per gross urban developed acre
- o 14.2 persons per net residential developed acre.

C. South Pantego Concept Plan. The detailed plan indicates a suggested physical development pattern of land uses, circulation and open space for the general undeveloped land between Smithbarry Road and Spur 303. Topography, drainage and flood plain features, along with residential densities and ownership lines derived from the existing and future Land Use Plan were utilized in its preparation. The area shown was selected in that it represents the only sizable undeveloped area remaining within the community. The plan reflects a desirable level and character of development consistent with this Comprehensive Plan report. Its implementation is tempered only by the Town's ability to encourage landowners and developers to develop the area in conformance with the guide tool, along with related zoning and subdivision reviews and decisions. Park, recreation and open space uses are delineated on the plan to reflect desired activities and needs, to satisfy population requirements, and attendant land arrangements.

D. Housing Needs. To satisfy the housing needs of the community by 1996, reference is made to Tables C and D found in the "Housing" section of this report. The number, density type and distribution of housing is outlined for easy reference. Due to the character of family income levels, federally assisted housing is not anticipated. Housing density patterns are appropriately distributed with respect to employment areas for convenient access, as is evident upon examination of the Land Use Plan.

E. Land Use Planning: Coordination Strategies. The Planning and Zoning Commission members should take advantage of (and the Council should encourage their participation in) various short courses conducted both within the region and elsewhere throughout the state regarding land use planning for Commission and

Council members. These courses are offered through both the North Central Texas Council of Governments as well as the Texas Chapter of the American Institute of Planners. Their purpose being to aid Commission and Council members in understanding and implementing community development and planning.

The Commission should thoroughly review all building zoning and subdivision requests for compliance with applicable codes, ordinances and municipal policies before decisions and permits are issued by the city. Routine building permit requests for single family dwellings, however, could best be handled by the city's Public Works Director. Expert planning and engineering consultant advice on complex zoning matters and on all subdivision requests should be employed to aid the Commission and Council in arriving at appropriate decisions and "developer agreements."

The North Central Texas Council of Governments should be consulted with respect to the development of community facilities, for coordination with area-wide plans and to avoid duplications of services and facilities.

HOUSING

EXISTING STRUCTURAL CONDITIONS AND ENVIRONMENTAL CONSTRAINTS

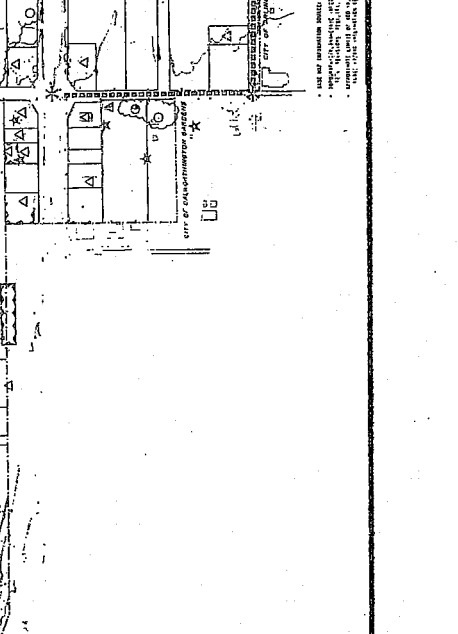
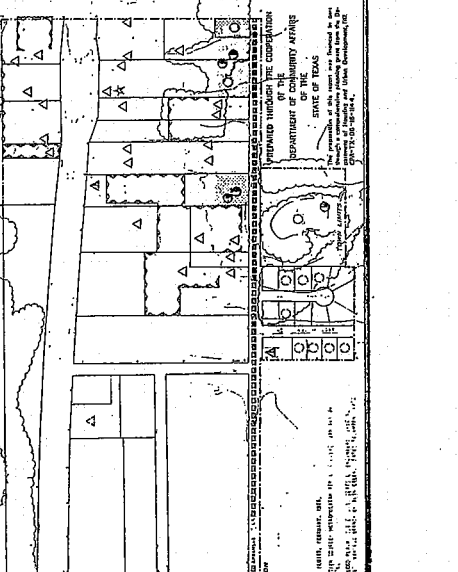
MARCH 1976

BUILDING TYPE	STRUCTURAL CONDITIONS OF PRINCIPAL BUILDINGS					TOTAL
	STANDARD AT	DETERIORATING	DILAPIDATED	URGER CONST.	COLLAPSE	
ONE FAMILY DWELLING	582	18	15	15	610	610
TWO FAMILY DWELLING	3	6	0	0	9	9
MULTI-FAMILY OR TOWNHOUSE DWELLING	14	116	0	0	130	130
RESIDENTIAL TOTAL	599	134	15	15	763	763
NON-RESIDENTIAL TOTAL	116	6	0	0	122	122
TOTAL	715	140	15	15	885	885

Notes:
 1. Buildings are shown in standard to the extent that they are structurally sound and meet the minimum requirements of the International Building Code, 1963 Edition, as amended.
 2. Buildings are shown as deteriorating to the extent that they are structurally sound and meet the minimum requirements of the International Building Code, 1963 Edition, as amended, but require minor repairs or alterations to meet the minimum requirements of the International Building Code, 1963 Edition, as amended.
 3. Buildings are shown as dilapidated to the extent that they are structurally sound and meet the minimum requirements of the International Building Code, 1963 Edition, as amended, but require major repairs or alterations to meet the minimum requirements of the International Building Code, 1963 Edition, as amended.
 4. Buildings are shown as urgent construction to the extent that they are structurally sound and meet the minimum requirements of the International Building Code, 1963 Edition, as amended, but require immediate repairs or alterations to meet the minimum requirements of the International Building Code, 1963 Edition, as amended.
 5. Buildings are shown as collapsed to the extent that they are structurally sound and meet the minimum requirements of the International Building Code, 1963 Edition, as amended, but require complete reconstruction to meet the minimum requirements of the International Building Code, 1963 Edition, as amended.

SIGNIFICANT ENVIRONMENTAL CONSTRAINTS AND FEATURES

- STREET DEFICIENCIES
- INTERSECTION IMPROVEMENTS NEEDED
- CONSTRUCTED ROADWAY WIDTH AND LACKING CURB AND GUTTER
- LAND AND VISUAL CLUTTER
- JUNK, LITTER OR DEBRIS ACCUMULATION WEEDS
- SIGN CLUTTER
- VISUAL SCREENING NEEDED TO MASK UN-ESTHETIC VIEWS
- LAND USE CONSTRAINTS AND FEATURES
- APPROXIMATE 100 YEAR FLOOD PLAIN BOUNDARY
- CREEK DRAINAGE IMPROVEMENTS NEEDED
- EXISTING AND PROPOSED 100 YEAR FLOOD PLAIN
- LAND USE CONFLICTS
- EXISTING EXTENSIVE TREE COVER



TOWN OF PANTEGO
TARRANT COUNTY, TEXAS

NORTH

0 200 400 600 800 1000

GALLIE & BUSINESS, INC.
ENGINEERS - ARCHITECTS
1700 WALTON STREET - FORT WORTH, TEXAS 76102

HOUSING

TOWN OF PANTEGO, TEXAS
COMPREHENSIVE PLAN REPORT NO. 1

I. EXISTING HOUSING CONDITIONS: ("Windshield" Survey of March, 1976)

Table A - Number of Existing Dwelling Units

<u>Dwelling Unit Type</u>	<u>Units Under Construction</u>	<u>Vacant Units</u>	<u>Occupied Units</u>	<u>Total Inventory</u>
Single Family				
- Conventional	15	6	595	616
- Mobile Home	0	-	-	-
Two Family	0	-	6	6
Multi-Family (including Townhouse)	<u>0</u>	<u>3</u>	<u>111</u>	<u>114</u>
Total:	15	9	712	736

Vacancy Rate:

- 1% - Single Family Conventional
- 0% - Two Family
- 3% - Multi-Family/Townhouse

Table B - Structural Condition of Principal Residential and Non-Residential Buildings

<u>Building Type</u>	<u>Under Construction</u>	<u>Standard Condition</u>	<u>In Need of Rehabilitation</u>	<u>Deteriorated (Substandard)</u>	<u>Total Inventory</u>
<u>Residential Buildings</u>					
Single Family (Conventional)	15	582	18	1	616
Two Family	0	3	0	0	3
Multi-Family/Townhouse	<u>0</u>	<u>14</u>	<u>0</u>	<u>0</u>	<u>14</u>
Subtotal: Residential Buildings	15	599	18	1	633

Table B - Structural Condition of Principal Residential
and Non-Residential Buildings (Cont'd)

<u>Building Type</u>	<u>Under Construction</u>	<u>Standard Condition</u>	<u>In Need of Rehabilitation</u>	<u>Deteriorated (Substandard)</u>	<u>Total Inventory</u>
<u>Non-Residential Buildings</u>					
Public	0	2	0	0	2
Commercial and Industrial	<u>2</u>	<u>116</u>	<u>6</u>	<u>0</u>	<u>124</u>
Subtotal: Non-Residential Bldgs.	2	118	6	0	126
Total Residential and Non-Residential	(17)	(717)	(24)	(1)	(759)

The locational characteristics regarding the structural condition of principal residential and non-residential buildings can be found on the map titled "Existing Structural and Environmental Conditions Map." A cursory analysis reveals the majority of single family dwellings are made up of 3 and 4 bedroom units, thus explaining the relatively high number of persons per occupied housing unit. This characteristic produces a heavy demand on schools, parks and recreation facilities. Even though a declining trend in household size is occurring nationwide, the rate of decline is much less in the Town of Pantego and Arlington than experienced elsewhere. The type of community facilities and services provided by neighboring Arlington attract larger household sizes in the immediate area.

Conditions indicating overcrowded dwelling units were not observed during the survey. A cursory analysis of gross dwelling unit densities (including streets and immediate open space) reveals that single family (conventional) dwelling units are developed at approximately 2.6 units per acre, cluster single family housing at 5.6 units per acre, and multi-family development occurred at approximately 14.2 units per acre. This characteristic reflects a low density of development which in turn increases the cost of providing and maintaining municipal services to the resident population.

The majority of single family home styles found in the community are of one story brick with wood shingle roofs. Renter occupancy of the single family home inventory is estimated to comprise less than 2% of the total occupied single family units. Home values are \$35,000 and upward, with the majority of homes in the \$40,000 to \$50,000 price range and above. Household income levels are deemed sufficient to support and maintain the existing housing market.

With the increase in land and development costs, cluster homes on smaller lot sizes (5,000 S.F.+) have been developed to a limited extent, along with a few townhouses. Conventional single family dwelling lots average 80' - 100' in width by 120' - 130' in depth, producing lot areas between 9,600 S.F. and 13,000 S.F.

Estimates of the Town's current minority population approximates less than 1/2 of 1% of the total residential population, and are housed in decent, safe and sanitary dwelling units.

II. HOUSING STRATEGIES AND POLICIES: EXISTING AND NEW DWELLINGS

Housing strategies employed over the planning period should contain a variety of approaches in order to insure stability and maintain "market fluidity." These strategies are discussed as follows:

A. Conservation. Approximately 60 - 65% of the 1996 housing units will be 30 years old. To prevent declining conditions and obsolescence it is recommended that extensive landscaping and tree planting programs be undertaken and drainage corrections in the central portion of the Town be made to insure a quality environment. Tree lined streets and pedestrianways, including extensive tree planting programs along primary arterial streets, will aid in buffering unwanted traffic noise and enhance property values. It is recommended that a minimum standards housing code, such as published by the "Uniform Building Congress" or "Southern Standards Building Code Congress," be adopted so as to provide the community with an enforcement tool to prevent housing decline. This tool should be employed with respect to the present 18 dwelling units in need of rehabilitation and to eliminate the single substandard dwelling identified in the housing survey. Annual paint-up - fix-up campaigns, conducted in the spring, will aid in encouraging property owners to make any needed minor repairs to dwellings. Enforcement of nuisance and weed ordinances will assist in maintaining aesthetically pleasing neighborhoods. Required screening of non-compatible land uses adjacent to established residential neighborhoods should also be employed to maintain the character of the neighborhoods. Non-encouragement of non-conforming uses in residential zoned areas should further be a priority item.

B. Economic Filtration. This strategy allows homeowners to "move up" from lower cost dwellings to more expensive dwellings as family incomes increase. Encouragement along these lines is important if housing stability and conditions are to be maintained. Care should be taken to prevent discrimination to race, color, creed, sex or national origin in the employment of this strategy.

C. Infill. As the community develops, there will be a small supply of scattered vacant residential lots. The community should work closely with the owners of these lots to encourage their development as a means of reducing expensive utility extensions and enabling a more economic delivery of municipal services.

D. New Housing. Priority of utility extensions should be given to those areas of sufficient size and ownership characteristics where economical and compact residential development can occur. Areas such as those lying between Smithbarry Road and Spur 303 from Rush Creek to Bowen Road, plus the area adjacent to the east corporate limits south of Park Row, should be considered. Such utility extensions should be coordinated through a Capital Improvements Program plan. Quality housing construction should be encouraged through proper enforcement of the community's Building Code, and adequate on-site inspections prior to issuance of a "certificate of occupancy." New housing developments should receive site plan review and approval by the community and its Planning/Engineering Consultants to properly assess arrangements, circulation, utility needs, drainage, screening and density conformance. Care in the utilization of existing subdivision standards, and requiring the developer to conform with specific developer-community agreements will aid in insuring quality housing development. Housing densities throughout the community should be balanced so as to provide a variety of dwelling types to satisfy housing preferences and life styles of the resident population. Continued emphasis on lower density housing is encouraged and appropriate if the community is to maintain its present character. Zoning ordinance changes should be made to enable the types of densities desired. As with existing housing resources, the community should strive to insure against housing discrimination. Emphasis should be given to quality rather than quantity housing. Sufficient quality and quantity of municipal water supply resources will be required if the community's housing needs are to be met. Mobile home dwellings have not entered into the current housing demands, nor are required to satisfy future housing demands of the town's expected population, due to the community income level.

III. HOUSING NEEDS AND DISTRIBUTION: CURRENT AND PROJECTED

Currently, housing needs of the resident population are being met, as is evident from family income levels and housing preference types, which have been dictated by market demands. Vacant land suitable for residential development and the densities imposed thereon, agreed upon by the Council, Planning Commission and Citizens Advisory Board, will reflect some changes in the number and density of future residential dwelling units.

At the present time 89% of the population is housed in low density dwelling units, 0.9% in moderate density dwelling units and 10.1% in medium density dwelling units. Future demands, land resources and density patterns indicate that 76% of the population will be housed in low density dwelling units, 14% in moderate density dwelling units, and 10% in medium density dwelling units, respectively. This reflects a slight decline in low density housing needs, an increase in moderate density housing needs, with the medium density housing needs staying somewhat constant.

Taking into account reasonable expected vacancy rates in types of residential units anticipated over the planning period, Table D reflects the number of existing dwelling units both in 1976 and that required by 1996, for low, moderate, and medium density types, to satisfy housing demands. The table further indicates the distribution pattern of the dwelling units with respect to micro-neighborhood areas. The various housing densities referred to in the table are defined as follows:

Low density - Conventional detached single family homes at a maximum density of 3 du/gross acre (including adjacent streets).

Moderate density - Single family detached cluster homes on small lots, two-family dwellings and low density (4-plex townhouses), at a density range of 4 - 8 du/gross acre, with an average density of 6 units/gross acre.

Medium density - High density (6-plex) townhouses at a maximum density of 12 du/acre, and low density garden apartments at a maximum density of 14 du/acre.

Based on the population forecast, it is evident that the community's housing demands should be achieved between 1985-1990. Units constructed after that period would be in the realm of replacement housing (such as due to fire losses, etc.) and some infill on any remaining scattered and overlooked vacant lots. Table C reflects new housing needs over the incremental planning period.

Table C - New Housing Needs and Demands: Goals

	<u>Existing 1976</u>	<u>1985-1990</u>	<u>1996</u>
Low Density Units	602	795	800
Moderate Density Units	20	148	156
Medium Density Units	<u>114</u>	<u>166</u>	<u>174</u>
Totals	736	1,109	1,130

To achieve the housing demands of the anticipated population the community should endeavor to encourage reputable builders with knowledge of the average family size make-up of its citizens as well as housing type preferences and styles. Public improvement standards for streets, utilities, etc., should not be varied to permit lesser quality than that which exists elsewhere in the Town. Such builders should be sought out and enticed to develop within the Town, whereas non-reputable builders should be discouraged. Adoption of updated codes and ordinances, as recommended by the North Central Texas Council of Governments, should also aid in achieving the desired quality of housing.

TABLE D - HOUSING NEEDS AND DISTRIBUTION (1976-1996)

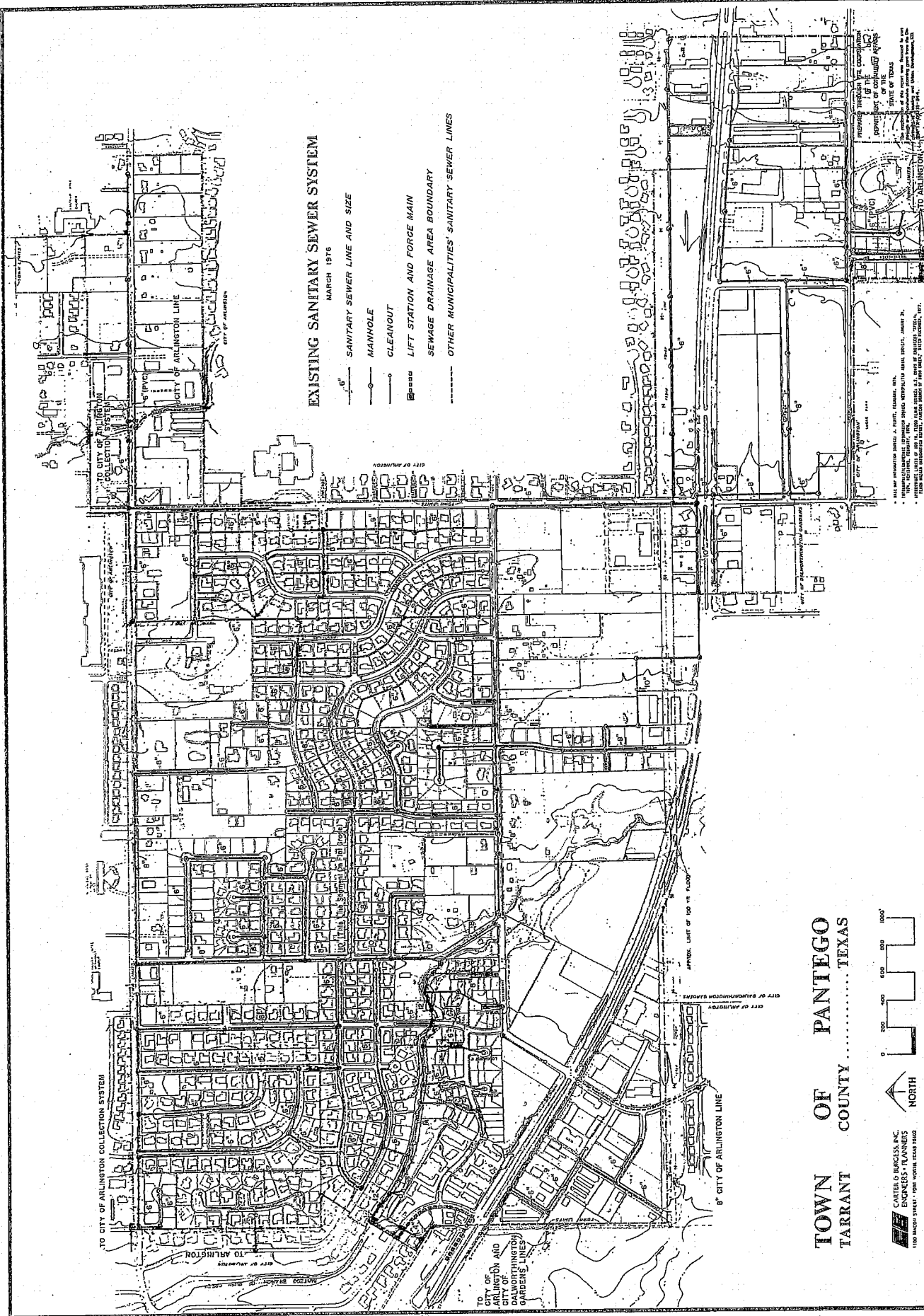
Micro-Neighborhood Areas		NUMBER OF DWELLING UNITS											
		Low Density			Moderate Density			Medium Density			Total		
		1976	Increase	1996	1976	Increase	1996	1976	Increase	1996	1976	Increase	1996
Area No.	Area Description												
Area No. 1	Park Row to Rush Creek & Wagonwheel to West Corp. limits	161	11	172	0	0	0	0	0	0	161	11	172
Area No. 2	Rush Creek to Spur 303 & Rush Creek to West Corp. Limits	1	0	1	16	61	77	114	60	174	131	121	252
Area No. 3	Park Row to Smithbarry/Creek & Wagonwheel to Bowen Rd.	386	96	482	4	0	4	0	0	0	390	96	486
Area No. 4	Smithbarry Rd. to Spur 303 & Rush Creek to Bowen Rd.	28	100	128	0	0	0	0	0	0	28	100	128
Area No. 5	Spur 303 to TESCO Easement & West Corp. Limits to Bowen Rd.	2	a/-2	0	0	0	0	0	0	0	2	a/-2	0
Area No. 6	TESCO Easement to So. Corp. Limits & Bowen Rd. to East Corp. Limits	15	2	17	0	8	8	0	0	0	15	10	25
Area No. 7	East Park Row (north-south) (Bowen Rd. to East Corp. Limits)	9	a/-9	0	0	67	67	0	0	0	9	58	67
TOTALS:													
	Existing Dwelling Units %	602			20			114			736		
		(82%)			(3%)			(15%)			(100%)		
	Dwelling Units to be Added %		198			136			60			394	
			(50%)			(35%)			(15%)			(100%)	
	Dwelling Units (1996) %			800			156			174			113
				(70%)			(14%)			(16%)			(100)

a/ Anticipated replacement by new commercial land utilization.

The only types of federally assisted housing anticipated in the community would be in the realm of FHA and VA loan guarantees. Income levels do not suggest Section 8, 235, or other federally assisted housing resource needs. The relatively low number of habitable housing units (18) discovered in the housing survey does not produce a sufficient volume for the community to qualify for rehabilitation loans with all the "red tape" involved and extra staff required. Income characteristics indicate that conventional loans for housing rehabilitation would be the more favorable course. Elderly residents do not appear affected by the habitable units found in the survey.

The community should monitor its new and replacement housing starts so as to keep abreast of any changing needs which might establish certain future trends, such as the number of rooms and bedrooms per unit, and lot sizes. These factors will indicate changing family sizes, population forecasts, housing densities, and affect the nature and type of community services and facilities required by such changes.

SANITARY SEWER SYSTEM

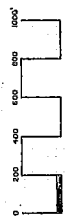


EXISTING SANITARY SEWER SYSTEM

MARCH 1916

- 6" SANITARY SEWER LINE AND SIZE
- MANHOLE
- CLEANOUT
- LIFT STATION AND FORCE MAIN
- SEWAGE DRAINAGE AREA BOUNDARY
- OTHER MUNICIPALITIES' SANITARY SEWER LINES

TOWN OF PANTEGO
TARRANT COUNTY, TEXAS



CARTER & BURRESS, INC.
 100 JACKSON STREET, FORT WORTH, TEXAS 76102

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SANITARY SEWER SYSTEM

TOWN OF PANTEGO, TEXAS COMPREHENSIVE PLAN REPORT NO. 1

I. GENERAL

The general area and conditions under which the sewage collection system exists is described in the section on Environmental Considerations under "Existing Conditions."

II. THE SYSTEM

- A. General Layout. The existing corporate area encompasses approximately 2,640 persons, as of March of 1976. The existing sewage collection system consists of approximately 785 service connections, of which 605 are residential connections and approximately 180 are non-residential connections. Within the Town limits, there are 66 residential and non-residential uses which utilize septic tanks for their means of sewage disposal. A minimum of 60 of these structures have sewer available (i.e., at the property line). The policy of Pantego requires, that if sewer service is available and the property owner's septic tank creates a health hazard, the septic tank must be abandoned and subsequent connection to the sewage collection system be made.
- B. Discharge Points and Subsystems. The sewage collection system is divided into several subsystems that discharge into other municipalities' systems for transportation to the regional treatment plant. One point of discharge for approximately thirteen commercial customers in the southwestern part of town is to the Dalworthington Gardens system. Pantego has four discharge points to the City of Arlington collection system. These discharge points are all gravity fed and have no metering equipment. The majority of the collection system (approximately 506 services) drains to a lift station in the western edge of the town where it is metered and pumped into a City of Fort Worth interceptor main for transportation to the Village Creek regional treatment facility.
- C. Existing Collection System. The collection system is made up of approximately 12.86 miles of vitrified clay pipe (except for about 1,600 feet of plastic (P.V.C.) pipe), ranging in diameter from 6 to 12 inches. The initial parts of this system were installed in 1968. The joints of the pipe are reported to be of the "Delta-Seal" type. The manholes are of the precast concrete and brick construction types, with the precast type making up about ninety percent of the total number. The manhole covers are primarily of the "pick-hole" type, with some "slotted" type covers throughout the system.

- D. System Construction. Construction techniques reportedly have varied over the history of the system's installation. Some reports of poor construction included the laying of sewer lines with open joints, incomplete encasement for water crossings, and poor connections to existing structures (i.e., manholes and mains). At present, there are no published standards of construction for the town. Newly constructed lines are tested by the hydrostatic test method to the criteria of having exfiltration of less than 150 gallons per inch of diameter per mile of pipe per 24 hour period. These new lines, as well as services, are visually inspected by employees of the Town's water utilities department.

III. ANALYSIS OF THE SYSTEM

- A. Scope of Investigation. During the physical analysis of the system, electronic flow meters were utilized to establish daily flows in key line segments of the system and to provide an insight as to any problems of inflow or infiltration. The flow meters recorded, on a circular chart, the depth of flow in the line segment at a particular manhole. From the depth of flow in the pipe and the velocity of flow (derived from the upstream pipe gradient), the discharge in the line can be calculated from empirical hydraulic formulas.
- B. Flow Monitoring and Analysis. After approximately one month of system monitoring at a number of key manholes and junctures in the system, the preliminary findings indicate that there is not an excessive amount of inflow or infiltration. Excessive inflow or infiltration is herein defined as that inflow or infiltration that can be economically corrected, i.e., the cost of corrective measures is less than the transportation and treatment costs of the effluent.

The indicated high rate of discharge through the meter station was due to a faulty check valve. Since changing the check valve the effluent through the meter station has averaged approximately 115 gallons per capita per day (GPCD). This flow includes infiltration which, at 150 gallons per diameter inch per mile of pipe (the current test criteria), would be 5± GPCD.

Diurnal fluctuation occurred in a normal pattern throughout the system. Recorded rainfall did not have a significant effect on the flow measured in the system. The failure of the system to react or surcharge during periods of storm runoff indicates the absence of major sources of inflow.

Some isolated portions of the system will continue to be monitored until the system is adequately tested and analyzed.

C. Sources of Inflow/Infiltration. Several possible points of infiltration and inflow were noted in the system. Examples of points of inflow found in the Pantego collection system are as follows:

1. A broken service line in a drainageway.
2. Displaced rings and covers on manhole.
3. Manholes that were located in the storm water carrying portion of the street.
4. "Pick-hole" covers used in street sections where slotted covers should have been utilized.
5. Top of some manholes were below high water mark in drainageways.
6. Broken lateral connection to manhole.
7. Erosion of drainageway around and under sewer crossings as well as around the main running in the creek.
8. Damage to upper wall of brick manhole, i.e., bricks missing and poor sealing.

Possible areas of infiltration in the collection system may be found:

1. In areas where underground springs are located near manholes and lines.
2. At poorly sealed manholes in low lying areas.
3. In lines in areas where surface drainage is a problem.
4. In areas where lines were installed with poor construction techniques.

Other problems that were found in the system that have been noted and/or corrected include:

1. Some line grades are too flat to maintain a minimum recommended velocity of two feet per second.
2. Failure of a check valve in the meter station to close which caused the return and recycle of metered effluent through the lift station and subsequent overcharging.
3. Overloading of lines (i.e., connecting a 10 inch main to a 6 inch line downstream) which causes the manhole to overflow during heavy flows.

4. Debris in manholes (rocks, mortar, etc.) causing partial blockage and sedimentation in lines.

IV. RECOMMENDATIONS

After analyzing the collection system, reviewing flow data, and studying population projections and growth trends, several recommendations are proposed. These recommendations are arranged in two categories: A) Immediate Improvements and B) Future Requirements.

A. The recommendations for Immediate Improvements are as follows:

1. Make a complete "walk-through" inspection of the collection system. This inspection should include, but not be limited to, removal of manhole covers and removal of debris and sediment, inspection of manhole inverts and walls for defects and flow characteristics, a careful examination of line routes along and across drainage courses, and examination of areas where poor drainage is evident with respect to providing a means of draining these areas.
2. Repair and/or regrout manhole rings and cover seats to manhole tops.
3. Repair and/or regrout connections of laterals and lines inside manholes.
4. Raise tops of manholes located in drainage course to above flood elevation or replace with "sealed" type covers.
5. Repair, replace, or place additional encasement around lines in creeks and crossings as necessary to protect line from cracking or breaking.
6. Provide erosion control in critical areas where line crossings are prone to erode and wash-out causing line breakage.
7. Install a removable plug or plug valve in the line leading south out of the manhole at Peachtree Street and Nora Drive to eliminate stagnation in that line segment, which was constructed on a flat grade.
8. Make daily visual inspection of the lift station for leakages, power outages, and general condition. Once each week, an operational check should be made of the lift station to assure proper operation of pumps, valves, and time/level controls.

B. Future Requirements. In addition to the above Immediate Improvements, the following Future Requirements should be initiated as required. Recommendations for Future Requirements are as follows:

1. Plan, design and construct a relief main from the lift station site to the manhole in the intersection of Sarah Drive and Roosevelt Drive. This relief main can be constructed as the area between Smithbarry Road and Spur 303 develops as a part of the development. The size of this relief main should be planned to be at least 12 inches in diameter.
2. In the areas currently on septic tanks and not serviced by the collection system a plan of sewer service should be initiated in order to provide orderly extensions of the system.
3. As plans for development are submitted for approval, a copy of the plans should be forwarded to the Town's Engineer, who should see that the proposed construction is in accordance with good design criteria. This technical review should be followed in the field by adequate inspection procedures to assure a system that would require a minimum of maintenance and cost to operate.

ENVIRONMENTAL CONSIDERATIONS

ENVIRONMENTAL CONSIDERATIONS

TOWN OF PANTEGO, TEXAS COMPREHENSIVE PLAN REPORT NO. 1

I. EXISTING CONDITIONS

Pantego is located near the midpoint between Dallas and Fort Worth, in north central Texas, with primary transportation access from State Highway Spur 303. The Town is bounded on the west, north, east and part of the south by the City of Arlington, and the remaining portion of the south boundary by the City of Dalworthington Gardens. Like the rest of the north central part of the state, the Town enjoys a relatively mild climate with temperatures ranging from a January normal of 42.6° F to a July normal of 84.7° F. Normally, rainfall precipitation is fairly well distributed throughout the year, except for infrequent drought periods. The annual rainfall accumulation averages approximately 32 inches, with the heaviest period occurring in April, May, June, September and October (5.2 inch average), and the lightest period during January (1.7 inch average). The overall annual rainfall ranges from 20 to more than 50 inches per year.

Geologically the Town is situated in the Woodbine Group, consisting of highland sandy-loam soils. Post Oak and Blackjack are the primary native trees found within the Town, with some Pecan, Elm and other native species found along the banks of the Pantego Branch of Rush Creek, which traverses the community in a northwest-southeasterly direction. Land form is relatively flat and some portions are poorly drained, with the predominant drainage direction being northwesterly. Elevation ranges from 530 to 645 feet above mean sea level. (See map titled "Existing Structural Conditions and Environmental Constraints," depicting the extent of existing natural and manmade environmental conditions.)

- A. Natural Environment. Generally the soils exhibit a high water erosion potential, moderate infiltration rate, moderate runoff rate, good traffic-support capacity, and a moderate corrosion potential. The moderate infiltration rate is a consequence of the deep subsoil clay content which does not allow for penetration of surface moisture, thus the rate also indicates a moderate permeability. Traffic-support capacity of the soils requires some degree of stabilization when used for road beds. The fine sandy-loam topsoils are easily eroded by surface water runoff, and evidence of such is found throughout the community. Stabilization of the soils through the nature and extent of tree, plant and ground cover maintained and provided, along with conservation management practices during construction development will aid in abating this problem. The moderate

corrosion potential of the soils attributes to problems of corrosion and fracture of unprotected buried water mains, gas pipes, communication lines and other utilities. Steps should be continued to reduce the electro-chemical reaction occurring in the soils as well as the utilization of materials which are not as susceptible to this condition.

Due to the relatively flat topography of the land form, the 100-year flood plain, delineated by the U. S. Corps of Engineers on the Pantego Branch of Rush Creek, is quite extensive. Care should be taken during drainage improvements to preserve the natural tree and vegetative cover along its banks so as to minimize future erosion potentials. Open space park and recreation use along the creek's reaches, throughout the community, should be considered as a potential solution, rather than enclosed or channeled drainage structures. Open space usage along the creek's course will also aid in providing a wildlife refuge for local native bird and animal species, and break the monotony of intense urban development.

The extent of existing tree cover (see map titled "Existing Structural Conditions and Environmental Constraints") has been appreciably diminished from that which existed 10-15 years ago - due to past practices of subdivision development. Tree planting programs should be undertaken in areas which are relatively void of tree cover, so as to enhance the urban environment, reduce energy costs and provide an aesthetic appearance. Care should be taken in species selection and variety to achieve stability, and to avoid a mass tree loss due to diseases which may occur which attack particular species in total.

- B. Manmade Environment. Deteriorated and obsolete housing and non-residential buildings do not present a significant problem at the present time. Scattered "problem" buildings do exist, however, and remedial program steps should be undertaken before additional buildings fall in a state of neglect and disrepair. Community concerns thus far, as is typical with new communities, have been focused on "new" building development rather than conservation and maintenance of existing buildings. As the Town matures through the ensuing years, careful attention will need to be given to building conservation in order to maintain a healthy environment. Early adoptions and enforcement of a model "housing maintenance code," and removal of substandard/obsolete non-residential buildings will aid greatly in this endeavor.

Approximately 8 single family dwellings exist in the Corps of Engineers' designated 100-year flood plain. Proper channelization, cleaning and widening of the creek affecting these homes will aid in reducing the potential adverse impact. A

small segment of residential area in the central part of the community experiences problems of periodic flooding during heavy rainfalls. This is brought about due to lack of foresight in requiring positive drainage systems when the area was built. Attention to this condition in newly developed areas should be given so as to prevent such occurrences from happening.

Overall, Pantego has a pleasing environment, disrupted by scatterings of street deficiencies, land and visual clutter and other land use constraints. Park Row street widening and drainage improvements are underway at the time of this writing, however, attention also needs to be focused on Nora Drive and Smithbarry Rd. for subsequent street improvement projects to better accommodate traffic flow. Numerous street intersection improvements are necessary to correct past deficiencies and improve safety, however, the character of existing development around some intersections does not aid in offering easy workable immediate solutions. "Clean-up fix-up" campaigns on a regularly scheduled basis will do much towards reducing the extent of junk, litter and debris on various scattered properties. Screening unpleasant views will also enhance the community's aesthetic appearance. Mixed land use conflicts can be abated through zoning measures, land value increases and natural attrition. Adverse clutter of signs and advertising devices can be controlled through more stringent zoning revisions pertaining to signs. Proper buffering of residential uses from non-residential uses can be achieved through zoning map and text revisions, so as to avoid future land use conflicts and incompatible adjacent land uses.

II. ENVIRONMENTAL ASSESSMENT: LAND USE PLAN

- A. Summary. The Land Use Plan incorporates numerous additional features and data input than was previously considered when the community adopted a Zoning Map as its "Master Plan" in April of 1970. The Land Use Plan includes an environmental corridor along the Rush Creek flood plain for needed park, recreation and open space use, as an example. Additional features incorporated included landscaped pedestrian/bicycle linkages throughout the community to encourage circulation to community facilities via these routes, as a means of minimizing energy fuel consumption; definitive standards for vehicular circulation routes; locations and standards for needed community facilities; density limitations and locations for specific types of residential land uses; and spatial distribution and intensity standards for various types of commercial activities and employment centers. Land use arrangements and quantities have been carefully considered with respect to needs and compatibility with existing and future development, along with the delivery of required municipal services and utilities. Such land uses and attendant activities are further considered within the confined limited corporate area of the community and relationships to the adjoining communities.

B. Environmental Impact of the Plan. The Land Use Plan update is an additional effort put forth by the Town to control and organize future land use growth and to foresee municipal facilities requirements that can be anticipated due to urban growth. The anticipated urban growth will remove lands from their natural state to an urban use, along with conversions from one use to another. It is proposed through plan implementation that certain existing natural areas, such as the Pantego Branch of Rush Creek, considered sensitive due to flood plains, natural beauty, existence of native vegetation, and place of refuge for animal life will be recognized and protected through appropriate land use controls. The plan further proposes the orderly development of the Town, thus reducing the possibility of haphazard development and adverse environmental impacts upon the use of land.

The growth of an urban area affects the natural state of land such as the creation of more concentrated storm drainage runoff waters and use of certain natural resources such as subsurface water. Additionally, greater amounts of sewage effluent are produced and greater quantities of solid wastes need to be disposed of. However, municipal controls and efforts are directed towards the conservation of natural resources by the planned concentration of land uses to better serve the orderly collection and elimination of solid and sanitary wastes within the standards of the Federal Environmental Protection Agency guidelines.

C. Adverse Environmental Effects. Any urban growth will remove land from its natural state and be modified to meet man's needs for habitat, commerce and leisure purposes. The projected population forecasts for Pantego indicate that urban growth will continue to expand and thus modify existing undeveloped areas. Even by employing municipal controls for development, it is anticipated that all areas within the Town will eventually be affected by man's presence. The Pantego Branch of Rush Creek is the major natural resource to the community, and it is anticipated that there will be urbanization adjacent thereto which will change the existing character to some degree. This type of area is recognized and considerations of appropriate land use are proposed to minimize any detrimental effects that may occur through municipally controlled use of the land.

Soils sensitivity is considered in the future Land Use Plan, as the soils are highly sensitive to erosion. Municipal controls employed during building, utility and street construction will aid in minimizing this adverse impact, along with a community-wide program to encourage extensive tree and landscaping plantings throughout the Town.

- D. Alternatives to the Proposed Plan. The long-range benefits that may be derived from a plan for urban growth are many, in that there are numerous development controls available locally, and through certain federal laws, that can be utilized to implement orderly and appropriate growth. The alternatives to the plan would be uncontrolled growth, this limiting protection to special areas of particular environmental significance. A second alternative would be to stop all urban growth at its present level. This alternative is virtually impossible to implement and unfair to those within the community, by causing them to provide the sole economic and physical support of the community.

With approximately 79% of the community presently developed in urban uses, the most appropriate course of action is to control the nature and extent of population and development growth to protect the natural and man-made environment, and properly utilize remaining undeveloped land resources. Such a course of action will aid in ensuring the community's environment and tax base, and independency of federal assistance to correct and abate improper land use decisions.

- E. Relationship of Uses to Man's Environment. The Land Use Plan has, as its major goal, the organized and controlled growth of urbanization. The plan is for the ensuing twenty-year period and all of its recommendations are for the long-range maintenance and enhancement of long-term productivity rather than short-term use of man's environment.

- F. Irreversible and Irretrievable Commitments of Resources. There are no known natural resources within the planning area such as mineral or fossil fuels. However, additional urban growth will indirectly cause an effect upon certain resources such as mineral, fossil fuels, forest products, etc., by the construction of urban facilities. The plan does not advocate limiting urban growth, except as is restricted by the "fixed corporate area," thus there will be a certain consumption of these natural resources. The Pantego Branch of Rush Creek environmental corridor is considered to be a natural resource to the community, and urbanization is anticipated to include this area for open space use at some future date. As stated earlier, municipal controls are being considered to control urban development within the corridor so as to enhance rather than destroy its natural and scenic beauty.

- G. Applicable Federal, State, and Local Environmental Controls. The Town keeps and maintains an updated library of federal and state laws, rules and regulations for environmental controls, and is committed to the carrying out of these controls. Sanitary waste collection is connected into the Cities of Fort Worth, Arlington and Dalworthington Gardens for disposal and treatment. Solid waste disposal is under private contract

and eventually will be disposed of in conjunction with a regional serving facility in the near future. The Town has qualified for and is a participant in the Federal Insurance Act with respect to the 100-year flood plain of Rush Creek. Acquisition of the remaining undeveloped flood plain land for park, recreation and open space purposes should negate the need for adopting further regulatory flood plain controls. Water quality, for domestic consumption, meets the State Health Department's minimum standards. Air and water quality standards established and adopted by the State are also applicable to the Town, however, the Town does not have "in-house" capabilities with which to monitor or regulate these standards. Control and abatement of unwanted and adverse noise impacts do not present problems of any magnitude to the Town, as major freeways, mining and excavation and intensive development are not found within, nor are feasible within the corporate area of the community.