AN ANALYSIS OF THE PLANNING AND DESIGN PROCESS
OF A SMALL COMMUNITY NEIGHBORHOOD:
TIMBER CREEK I, POTTAWATOMIE COUNTY, KANSAS

by

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B.S., Cook College, Rutgers University, 1982

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A MASTER'S REPORT

submitted in partial fulfillment of the
requirements for the degree

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Approved by:

[Signature]
Major Professor
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CHAPTER 1

INTRODUCTION

Community Planning and Design.
Where would you prefer to live? More specifically, what kind of town, neighborhood, and house meets your needs? Since residential environments are an important part in people's lives, town planners and designers need to know about people's attitudes, perceptions, and preferences of their community. This report will analyze the housing development prototype, Timber Creek I in Pottawatomie County, Kansas for the design aspects of economic factors, planning policy, physical features and social considerations.

Goals for community planning can be defined and it is the knowledge of the public's wants that can help promote a way of life that permits satisfaction of psychological needs and simplifies the task of satisfying material needs. In addition, one's goals could help to provide a physical and social environment harmonious with human nature.¹

¹ Corbett, p. 8
A good solution for a community looks to the goals formed through and by the people, and depends also on the planning and design process. A coherent plan is one that deals with many factors simultaneously, working on broad as well as specific scales. For instance, a strategy for community neighborhood planning uses information on population demographics and social factors, past trends of housing, land use analysis, circulation patterns, recreation analysis, economic flow, education analysis, and commercial patterns— to cite a few aspects. People want the best and most up to date of these elements, as they pertain to their own environment. They want an environment that is safe, that allows for social interaction, for expressions of emotions, and that stimulates a better quality of life.\(^2\) Marans and Wellman found that, "Even though a person's assessment of his financial well-being, family life, and health are more germane to the overall quality of life experience than the person's assessment of his neighborhood or housing, the residential environment is subject to greater alteration by design and planning than any of the other situations of the individual."\(^3\) Therefore, it is the responsibility of the planners and designers of communities and neighborhoods to be responsive of the needs and situations of the users, through a variety of ways such as

\(^2\) Hester, p. 2

\(^3\) Marans and Wellman, p. 37
observation, analysis, and research, so the planning and design process will be for the people.

**Purpose of The Report.**

This report recognizes and assumes that the planning and design process is contingent on the people's wants, values, and needs. Planning for a successful or satisfying residential community then, must occur through some sort of integrative process that takes into account economic, social and physical aspects of the environment. The intent of this report is to study the planning and design process that went into the creation of the residential neighborhood community of Timber Creek I, in Blue Township, Pottawatomie County, Kansas. Interviews, a questionnaire, observations, and actual and theoretical research are the tools used for this analysis and to come to the end product of helpful guidelines or a list of design criteria for aid in future planning and design processes.

Design criteria used in the development of residential environments, are guidelines by which professionals, such as landscape architects, architects, planners, engineers, etc, can use to design and plan for the public. Oscar Newman states that, "Design guidelines are statements about the organization and positioning of activity areas and their linkage with one another. Guidelines are intended to provide an indication of the generic rather than specific physical form appropriate to needs of different human
activities."

Thus, the design criteria presented in the report is not intended to be an all-encompassing criteria list for future planning. Instead, the design criteria are justified by the analysis of this small town community neighborhood Timber Creek I, and hopefully, it will be used as a model in the assessment of other proposals in meeting the programmatic needs of different client groups.

Report Format.

The report will follow a format of broad to specific considerations of town design. The historical and theoretical aspects of community planning and neighborhood design are presented first as background for the analysis of the planning and design process of Timber Creek I and it includes social factors in particular. Then people's strategies of choosing a place in a neighborhood and the preference for small towns are discussed in the next chapter. The next section will then recall the design aspects that went into the design and planning of Timber Creek I. Specific design criteria dealing with economic, planning, physical, and sociological aspects based on the prototype, Timber Creek, and research will be the outcome of this report.

* Newman, Design Guidelines p.7
Timber Creek I was selected to be the subject of this report on small town residential neighborhood planning and design because it exemplifies a relatively residential environment in a rural area of Pottawatomie County. It appears to be a "typical" neighborhood, yet stands out due to unique and ecological considerations in the design solution and perhaps more importantly, because of its vital feeling of community. The residents' values and behavioral influence of the physical community environment were measured through a questionnaire and served as a means to evaluate Timber Creek's design.

The terms "neighborhood", "residential neighborhood community", and "residential environment" all refer to a smaller entity within the larger context of the town or community. "Small town" and "small community" refers to incorporated cities with less than 2500 population; the U. S. Census considers this population size to be the breaking point. Consequently, the terms "rural area" and "rural community" refers to areas called townships within counties that are still developing and/or in mainly agricultural use with less than 2500 population.
CHAPTER 2

HISTORICAL AND THEORETICAL ASPECTS

Town Planning and Design.

The philosophy of the ancient Greeks towards community design was that the human viewpoint was the determining factor in the design. This has been true of various times in past town planning. Patrick Geddes raised similar points about the human interest of neighborhood and the form of community in England at the turn of the century. He thought that cultural vision and expression, and social and moral enthusiasms should be part of the planning process.5

Residential town layout and design in the late 19th and early 20th century followed these ideals of Geddes and the philanthropic and land conscience British town planning concepts of Ebenezer Howard. In Howard's book, **Tomorrow: A Peaceful Path To Social Reform**, published in 1898, he showed his plan for a satellite town called a Garden City. His program was to stop people from moving into cities and to redistribute the population in a healthy manner. The town-country unison theory provided the best of both worlds—integration of classes, social services, and a sense of

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5 Stalley, p.197
Community. The Garden City movement attempted to secure a social balance between socioeconomic groups, and to integrate the landscape and the people.6

While a garden city is made up of a number of neighborhood communities, it should not be confused with the neighborhood itself. In America, the early town and neighborhood planners were some of the first landscape architects such as Olmstead, Vaux, and Cleveland. The integration of social factors to the design of neighborhood space originated with Frederick Law Olmsted, Father of Landscape Architecture. He found that the design of the physical environment has a limited impact on social problems, and designs could help reduce friction between groups, encourage class interaction, support family activities, and serve people's needs.7

New Towns.

Olmsted's influence in the early part of the twentieth century prompted a sense of social responsibility of the professional to the user. An example is the "quasi-rural" town, Radburn, in New Jersey, that was designed and partially built by Henry Wright and Clarence Stein. There are central parklike open spaces, and pedestrian walks are separate from the single family detached houses and clustered dwellings. The outcome was that of a close knit

6 Ratcliffe, p.34
7 Hester, p.45
society with its combinations of private, semi-private, semi-public, and public spaces forming a pleasant living environment.  

The principles of Radburn were not abandoned, and they were an inspiration for "new town" developments. A few are in the United States, such as Columbia, Maryland and Reston, Virginia, as well as others in Europe. The U.S. communities have a variety of recreational facilities, children activity places, and shopping and community centers, but largely restrict their owners to the upper middle class.  

Western Europe, for the past 50 years has expounded on the physical planning principles of community design that America has neglected for the most part. Land is bought in large tracts and developed into housing amidst areas of preserved landscapes, open space, and neighborhood centers. However in both continents, many of the new towns lack adequate vision and decentralization.  

Suburbs.

Meanwhile, subdivisions have spilled over the American countryside in the post World War II years. By the year, 1970, more people lived in the suburbs than lived in cities.  

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8 Newton, N. p.485  
9 Molen, p.33  
10 Corbett, p.6  
11 Clawson, p. 47
Herbert Gans studied how the bedroom community of Levittown, New Jersey was planned and why people choose this Philadelphia suburb. In the early 1960's he found these generalizations that could be adhered to all new towns and suburbs:

A new community is a physically new place that is culturally similar the old community. Residents usually aspire to the house, family life, neighboring, and friendship, and while they are not concerned with the larger community at first, they do like the community that evolves. The "source of change" is in the new house, the opportunity for home ownership, and most importantly in the housing mix. Lastly, local government can meet the needs of the majority of voters and largely unresponsive to powerless minorities.¹²

Gan's study had the theme of determining to what extent the community is made by its residents and to what extent the community is made by leaders, planners, and other professionals who conceptualize the ideal community. He said, "In the last analysis, then, the community (and its origin, impact, and politics) are an outcome of the population mix, particularly of its dominant elements and their social structure and culture."¹³

It has been clear in man's community building past that there is human interest in planning and design. Planners, designers, politicians, etc, to a large extent, determine the built environment. Yet, it is ultimately the people who choose where and how they want to live. These individual

¹² Gans, pp. 408-411
¹³ Gans, p. 411
preferences and feelings of neighborhoods and small towns are explored in Chapter Three.
CHAPTER 3

PEOPLE'S CHOICE OF PLACE

"Andrew Jackson said, 'But you must remember, my fellow citizens, that eternal vigilance by the people is the price of liberty, and that you must pay the price if you wish to secure the blessing.' To secure the blessing and guarantee themselves a quality life at home, residents have begun to show a greater interest in their neighborhoods..."\(^1\)

Neighborhoods are the places that are close to home, and due to their use and familiarity, people consider this territory their own. Boundaries are established as to the area that people perceive as their neighborhood. This neighborhood identification is correlated with attitudinal variables by Hojnacki. The variables are:

1. Identification of geographical configurations of size and commonly accepted boundaries.

2. The level of social subgroup interactions through the use of mediating institutions and subgroup sharing of neighborhood facilities.

3. The level of perceived threat by outside groups and the level of optimism about the future of the

\(^1\) Hester, p. 13
neighborhood.

**Choice Strategy**

Defining a neighborhood area then, depends on the attitudes and perceptions of the people who live there. Choice is a method by which people seek comprehensible preferred environments at various environmental scales.

Simplicity of form is easiest to understand and opens up avenues for people's choice and involvement. In addition to choice, another strategy man uses in selecting and coping with an environment is the factor of control. Kaplan and Kaplan use this concept of choice and control in regards to territory and community. They say that together choice and control...

create a pattern of coping that has striking similarities to the behavior called 'territorial' in other animals....Territory would thus exist anytime there is a well-developed cognitive map with associated positive feelings. It is a domain within which recognition and prediction can be carried out with confidence and ease. It is valued for the way it facilitates making sense, for the opportunity for choice and control it provides, as well as for the many positive associations it comes to have. Control is sometimes of the environment, sometimes of the behavior of others, and sometimes of the flow of information. It can be exerted at an individual and at a group level; it also can be strongly influenced through design and planning.\(^\text{15}\)

\[^\text{15}\] Maikherjee, p. 150

\[^\text{16}\] Kaplan, pp. 264-265
Private and cooperative territory is an important element for the vitality of a community. Many small towns have this binding together cooperativeness that gives a sense of community and a further motivation to people to use their abilities for mutual benefit. "...it becomes apparent that private territory plus cooperative territory are imperative to a healthy society, and that it is better for children, and indeed all family members, to live in a humble dwelling in a vital community than in a mansion in an incomprehensible un-neighborhood." 17

Movement to Small Towns.

In the 1940s through the 1960s, county census data show a net outmigration of people from the nonmetropolitan counties, although towards the end of this period, the outmigration from nonmetropolitan areas slowed up. 18 Since the early 1970's, there has been a back to the land movement or what is called a "rural renaissance". 19 This population turnaround from the cities and suburbs to the rural areas and small towns shows a significant reversal of the migration patterns of several decades.

Individuals and families are choosing the nonmetropolitan areas more often than staying in larger urban regions. More and more Americans are thinking positively about the small

17 Molen, p. 14
18 Marans, p. 1
19 Flittie, p. 14
town community and the lifestyle it represents. Small towns have a more ecologically balanced environment than do cities and they also maintain a sense of social community. The sense of community is a critical need for human beings living together and sharing even minimum values, goals, and expectations of the good life.\textsuperscript{21}

Ahlbrandt and Cunningham (1979) have found that measures of social network, neighbor friendliness and sense of community had the strongest association with commitment and satisfaction of their environment.\textsuperscript{22} People have a set of values that they place on their environment, that is, to the house, residential area, the larger community, and the city at large, and behavior patterns evolve.\textsuperscript{23} This environmental value concept is made into a list of six major categories defined by Appleyard (1973):

1. Values related to \textit{survival}, e.g. safety, security, health.
2. Values related \textit{comfort} (or lack of stress), e.g. spaciousness, quietness, light, cleanliness, ease of movement.

\textsuperscript{20} Kaplan, p.278
\textsuperscript{21} Kaplan
\textsuperscript{22} Ahlbrandt, p. 42
\textsuperscript{23} Chapin, p.4
3. Values related to **efficiency**, e.g. accessibility, convenience, orientation, information.
4. Values related to **personal development**, e.g. privacy, identity, territorial control, personal expression, environmental mastery.
5. Values related to **social development**, e.g. social interaction, equity, cultural expression.
6. Values related to **environmental administration**, e.g. management efficiency, economy, adaptability.

These generalized values and subsequent behavioral influence of one's environment can be linked to the physical design of communities and can serve as a means to evaluate such design. These values will be the basis for the evaluation of Timber Creek I design aspects under the headings of Economic Factors, Planning Policy, Physical Features, and Social Considerations, all in Chapter Four. Since varying socioeconomic factors, the size of the setting, and related design aspects have different effects on people's orientation to the social and physical environment, this study will look at the single prototype of a small town neighborhood community. In this way, the population and the territorial boundaries are defined, so design aspects can be evaluated and the physical or human scale can be analyzed.

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24 Ben-Elia, p.25
25 Ben-Elia, p.29
CHAPTER 4

TIMBER CREEK I ANALYSIS

Timber Creek I is a residential development comprised of fifty six single family homes in Blue Township, an incorporated area of Manhattan, Kansas in the western part of Pottawatomie County. Figure 1 illustrates the Timber Creek I site plan location in relation to Manhattan and also shows the layout of houses on the linear shaped piece of property that is bound on the west by Pottawatomie State Lake Road and on the east by a wooded area and ravine of Elbo Creek.

The Timber Creek I design clusters homes around central open spaces and loop roads that form a series of neighborhoods with a sense of community. The developers, Habitats, Inc., sough to find an integration of neighborhood by way of the physical design and the provision of services. From the developers point of view, they were "trying to do something meaningful in terms of zoning, planning, and people."26

The residents of Timber Creek I were asked what their opinions were about Timber Creek I and the surrounding area. A questionnaire was used to obtain and measure data of the attitudinal, behavioral, and sociodemographic

26 Interview-Day
characteristics of respondents. (Appendix A) The questionnaire was personally dropped off to the residents or placed on their door at fifty-one homes on two separate afternoons and picked up on three different days at various times of the day; five of the homeowners were in the some stage of moving or on vacation, and were unable to receive the questionnaire at all. It was emphasized in a cover letter and in talking to the residents at the drop off that the residents' participation was very important for a true representation of their neighborhood, that their assistance was entirely voluntary, and that all information would be kept confidential. Likert scales provided a selection of categories for possible responses to various questions. These responses were then ranked and tabulated for frequency and cross tabulated with personal data.

The results of the 71% return of the residential satisfaction questionnaire will be discussed in the following sections as they pertain to the aspects of the planning and design of Timber Creek I in Pottawatomie county. The design aspects categories of economic, planning, physical, and social characteristics will be treated one at a time, even though these factors in the community environment are interrelated, for the purpose of outlining design criteria that went into the creation of Timber Creek I. They are to be looked at in the generalized light of Newman's design guidelines defined earlier in this report.
Economic.

The intent of Timber Creek I was to provide housing alternatives in the Manhattan area for the average income buyer. In 1972, Habitats, Inc., the developers who designed, engineered, and built Timber Creek I, was made up of four partners with the intentions of marketing modular housing units within a quality setting on the outskirts of Manhattan. However by 1976 the two remaining principals were building customized homes. Originally, in 1972, the average price of a home was approximately $24,000; this figure increased to the $35,000-40,000 range by 1976, and by 1980 the average price had risen to approximately $50,000. The increased cost of buying a home in Timber Creek I can be attributed in large part to the tremendous inflationary cycle—particularly in the construction trades during the mid to late 1970's. Other factors that raised home values of Timber Creek I were high interest rates, and the economy. Dennis Day, one of the principal developers of Timber Creek I, said in an interview, "Since 1978, it has not been profitable to be in housebuilding or land development within the Manhattan Market area."27 In 1972, the average cost of construction for a 1,200 square foot home was $21.00 per square foot, while today the cost for the same 1200 square foot home in Timber Creek II is approximately $60.00 per square foot.28

27 Interview—Day
Actually, the cost of buying a home in Timber Creek II is even higher than the $60 per square foot given the costs of streets, sewer, and water. Improvements were financed via county bonding assessed against each lot paid by the homeowner in the form of special assessments over twenty years. The cost of streets, sewer, and water within the Timber Creek I development, on the other hand, were financed by the developers and included within the cost of the home.

Demand for a single family house in the Manhattan area has been increasing in the last ten year period since 1974 due to a steady turnaround and slow, but steady growth rate. Prices of houses in Manhattan proper range widely according to their location. However, the average price of a home on the west side of Manhattan compared to a similar house in Timber Creek I, runs approximately $3,000-5,000 more.\(^29\)

Most residents of Timber Creek I stated in the questionnaire that they felt that they initially and presently have a good real estate investment value, relative to others in Manhattan, as is seen in Table 1 in the following text.

Of course, the pricing of homes depends on the type of financing and the variations in home size, amenities, lot size, etc. People seem to be evenly divided regarding the choice of in-town or out-of-town housing. Realtors

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\(^{28}\) Interview- Day

\(^{29}\) Interview- Blanton
TABLE 1

Real estate investment value opinion

<table>
<thead>
<tr>
<th></th>
<th>Strong Agree</th>
<th>Don't Know</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good initial real estate investment value, relative to others in Manhattan.</td>
<td>40</td>
<td>52.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Good real estate investment in the past years, relative to others in Manhattan.</td>
<td>35</td>
<td>45</td>
<td>15</td>
<td>2.5</td>
</tr>
</tbody>
</table>

% is based on data of the number of residents who responded n = 40

attribute these decisions to provision of services and amenities, preferences for space and neighborhood, driving distance, and taxes. Taxes are significantly higher within Manhattan, approximately $1,000 higher per average dwelling, compared to Timber Creek.\(^{30}\) Taxes are definitely a major consideration in homebuying, as is seen by the 50% of the respondents who checked "low taxes" as one of their three reasons for selection of Pottawatomie County as the location for their family home (Appendix A- Question A4A), and by the 75% who wrote it out in the open-ended question section of the residential satisfaction questionnaire. Taxes are one consideration among other factors effecting a homebuyers choice in the market place; they change according with the

\(^{30}\) Interview- Winterrowd
growth and development of the town, area, and county. It is difficult to predict the growth of Pottawatomie County because of the fluctuating growth patterns in and around the Manhattan area. The Pottawatomie County planning policy will be examined next, for insight into the projected effect on Timber Creek and the surrounding area.

Planning Policy.

The Pottawatomie County Area Development Plan is divided into several districts for management purposes including the southwest planning district of the county extending from Manhattan, on the west, to Wamego on the eastern boundary as delineated on the accompanying maps taken from the Pottawatomie County Master Plan Report in Figure 2 and Figure 3.

The Southwest planning district is made up of several townships including Blue Township within which Timber Creek lies. Blue Township and Southwest Pottawatomie County access is via U.S. Highway 24 which is a major arterial route between Manhattan and Topeka. Highways 177 and 99 intersect U.S. Highway 24 providing access to Interstate Highway 70 ten miles to the south and to U.S. Highway 36 sixty miles to the north.

Blue Township was comprised of 1,040 people in 1977, compared to 646 people in 1970. Yet, the East Manhattan area proper, where Timber Creek is located, was made up of 180 people in 1977 as compared to 216 in 1970. This is
Figure 2a
Detailed Location of the Planning Area

The planning area includes all
of the land area of the follow-
ing townships:

Blue
St. George
Louisville
Wamego

Also included are the southern
16 sections of Pottawatomie
Township.

Location - Page 2a
May 3, 1977
attributed to changing land use designation. In the past, the area had residential development interspersed with some commercial and agricultural activity. The change to a commercial and industrial pattern is seen as good for heavy land use activity due to the transportation services and lower lying lands that can better be enforced with floodplain restrictions. (Appendix C-P.C. Master Plan- Land Use, P. 11-12)

At the present growth rates, Blue Township can expect a large percentage increase between 2,200-2,400 persons within the study period of 1977-1993. Likewise, the area within a twenty mile radius of Manhattan, that includes part of Blue Township, is projected to rise to approximately 10,250 persons based on a linear average estimate. (Appendix C-Figures 9 and 10)

The land use within the Timber Creek development is Single Family Residential (Appendix C-Figure 14b) surrounded by agricultural land use to the south and mixed-agricultural land use to the east. (Appendix C-Figures 12 and 13) Within the Pottawtomie County Planning Policy, future land use of community development are determined by the criteria of access, topography, sanitation capability, agricultural conflict, and overall rational location. (Appendix C-Figure 17 and Table 4 and 5)

As land is sought by developers and for agricultural practices purposes alike, conflict is inevitable. The
Planning Commission restricts housing and other types of development from prime agricultural land unless certain standards are met. The standards are:

1. The development does not promote scattering and is therefore classed as Planned Unit Development.

2. The development promotes high density and open space practices. Such densities shall be greater than three dwelling units per acre.

3. The development is rationally located so as to be accessible to transportation without actually promoting "strip" development.

4. The development incorporates internal water and sanitary facilities on a group basis rather than individual lots.

5. The development promotes efficiency in land use as determined by sound planning and engineering practices.\(^\text{31}\)

The following reasons were stated in the residential satisfaction questionnaires open-ended question section that the following reasons were stated by respondents as to what features of Pottawatomie County they liked the most or the least. (Table 2 and Table 3 in the text)

Low taxes are a major consideration to living in Pottawatomie County, but many respondents did note the rural character as being an asset of the area. In general though,

\(^{31}\) Appendix C- Pottawatomie County Master Plan Report, p.5
TABLE 2
Pottawatomie County Features Liked the Least

(Could answer more than once)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low taxes</td>
<td>75%</td>
</tr>
<tr>
<td>Rural, away from city</td>
<td>30%</td>
</tr>
<tr>
<td>Cost of housing</td>
<td>15%</td>
</tr>
</tbody>
</table>

TABLE 3
Pottawatomie County Features Liked the Most

(Could answer more than once)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor road conditions</td>
<td>10%</td>
</tr>
<tr>
<td>Too far from county seat</td>
<td>10%</td>
</tr>
</tbody>
</table>

the respondents of the questionnaire did not appear to be knowledgeable of the planning policy of the County, since many of the people did not fill in any answer for the open-ended question about their opinion about Pottawatomie County.

Site Analysis.

Consideration of the natural patterns and their resulting impact on community planning is a necessity. A resource analysis includes studies of soils, topography, surface and underground water, vegetation, weather and climate, solar and wind patterns, and wildlife. Site patterns indicate the suitability of the land for particular uses and development
types as well as the intensity of that development. Recognizing site and land characteristics in the planning process allows for the creation of a comfortable and usable environment, and usually results in cost savings as well for the homeowner.

The soils in the area of the County where Timber Creek I is located are Class I, Kipson-Martin-Sogn types. The soils underlying Timber Creek I are both heavy clay/qumho and sandy, silt loam to loam with the only major problem having to do with the construction and maintenance of roads due to expansive, unstable soils. The relief of most of the site is between 1040-1045' above sea level. Near the creek, exists a heavily wooded deep ravine. The area has a low available ground water yield of less that ten gallons per minute. However, a major aquifer, the Kansas River aquifer lies a few hundred yards south of the Timber Creek southern property boundary, and it is from there that Timber Creek I and Timber Creek II receive their water supply.

The results of the questionnaire show that 15% of the respondents wrote in an open-ended question that they do not like the "hard" drinking water in Timber Creek, while 67.5% rated the water supply excellent or good and 32.5% rated the water supply only fair or poor. These figures rating the adequacy of the water show that the majority of respondents

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32 Appendix C- Pottawatomie County Master Plan Report, p. 2, Figure 3
33 Appendix A- Questionnaire, questions B1B and A1M
are satisfied, but the essay question response of 15% does show some indication of dissatisfaction.

Utilities and Services.

The heavy clay/gumbo soil conditions within Timber Creek I effectively limit sewer disposal options in Timber Creek I. Individual septic systems were not a possibility, so therefore the an extended aeration waste treatment system was constructed on the southern boundary of Timber Creek I.

All utilities are underground to preserve the visual integrity of the Timber Creek community allowing unspoiled views to the woodland and surrounding prairie. Utility Management Incorporated, U.M.I., a private corporation, was organized to manage the water, sewer, cable and showtime television, and trash services for Timber Creek. Telephone, post office, and school system are generated within the Manhattan service area, while Pottawatomie County provides fire and police protection. Busing is provided to Manhattan with the exception of the children who attend the nearby Green Valley Elementary School.

Residents of Timber Creek I use these facilities and services daily, and rate their adequacy as is shown in Table 4 below.

Table 4 shows that the majority (at least 60%) of respondents thought the street circulation in the development and the surrounding area was excellent or good, as well as all the facilities and services except for quest
TABLE 4

Respondents Ratings of Utilities and Services

<table>
<thead>
<tr>
<th></th>
<th>Excel %</th>
<th>Good %</th>
<th>Fair %</th>
<th>Poor %</th>
<th>Can't Judge %</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Flow of vehicular traffic in the development.</td>
<td>40.0</td>
<td>47.5</td>
<td>12.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b) Guest parking.</td>
<td>2.5</td>
<td>20.0</td>
<td>32.5</td>
<td>42.5</td>
<td>0</td>
</tr>
<tr>
<td>c) Pedestrian safety.</td>
<td>5.0</td>
<td>55.0</td>
<td>27.5</td>
<td>10.0</td>
<td>0</td>
</tr>
<tr>
<td>d) Highways and roads to stores/surrounding towns.</td>
<td>32.5</td>
<td>57.5</td>
<td>10.0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>e) Landscaping.</td>
<td>15.0</td>
<td>65.0</td>
<td>17.5</td>
<td>2.5</td>
<td>0</td>
</tr>
<tr>
<td>f) Parks/recreational facilities.</td>
<td>25.0</td>
<td>52.5</td>
<td>17.5</td>
<td>5.0</td>
<td>0</td>
</tr>
<tr>
<td>g) Waste treatment center.</td>
<td>45.0</td>
<td>35.0</td>
<td>5.0</td>
<td>5.0</td>
<td>7.5</td>
</tr>
<tr>
<td>h) Sewage system.</td>
<td>42.5</td>
<td>37.5</td>
<td>7.5</td>
<td>2.5</td>
<td>7.5</td>
</tr>
<tr>
<td>i) Fire protection.</td>
<td>5.0</td>
<td>20.0</td>
<td>35.0</td>
<td>25.0</td>
<td>15.0</td>
</tr>
<tr>
<td>j) Police protection.</td>
<td>20.0</td>
<td>32.5</td>
<td>35.0</td>
<td>5.0</td>
<td>7.5</td>
</tr>
<tr>
<td>k) Educational services.</td>
<td>25.0</td>
<td>57.5</td>
<td>7.5</td>
<td>0</td>
<td>10.0</td>
</tr>
<tr>
<td>l) Emergency medical and health care services.</td>
<td>12.5</td>
<td>37.5</td>
<td>27.5</td>
<td>2.5</td>
<td>20.0</td>
</tr>
<tr>
<td>m) Water supply.</td>
<td>25.0</td>
<td>42.5</td>
<td>17.5</td>
<td>15.0</td>
<td>0</td>
</tr>
<tr>
<td>n) Refuse pick-up.</td>
<td>55.0</td>
<td>42.5</td>
<td>2.5</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

% is based on data of the number of residents who responded, n = 40

Parking, fire and police protection and emergency and health care services. The data in Table 4 shows that almost half of the respondents checked that the guest parking was poor, thus indicating the need for more adequate facilities; perhaps more areas of parking spaces can be installed on the site. Also, a significant percentage of respondents considers the fire protection fair or poor (60%) or cannot judge (15%). These and the figures for the rating of police and health care could mean a closer look at the adequacy or availability of these services.
The Homeowners Association enforces the restrictive covenants, collects dues, manages the collective affairs of the Association contracting utility services as well as maintaining streets, common area and recreation facilities. A Timber Creek I homeowner must pay monthly dues of $24 (1984 figure) to the Homeowners Association to support services. The Homeowners Association documents include the Declaration of Covenants, Conditions and Restrictions that covers Property Rights, Member and Voting Rights in the Association, Covenant for Maintenance Assessments, Architectural Control, General Provisions, Restrictions on Use and Easements and Common (Party) Walls and Fences; By-laws of Timber Creek East Homeowners Association, Inc.; and Homeowners Association Responsibilities. (Appendix B) These covenants, conditions, and restrictions were established to maintain the visual quality and open space character, and are enforced to a degree. While 22.5% of the respondents of the Timber Creek Residential Questionnaire stated in an open-ended question that the Homeowners Association and its rules were a feature of living in that development that they liked the least, as shown in Table 5, Table 6 shows that people do like the benefits of the rules as they pertain to landscaping, recreational facilities, and the community feeling.

Site Planning.
### TABLE 5

**Timber Creek Features Liked The Least**

(Could answer more than once)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeowners Association</td>
<td>22.5%</td>
</tr>
<tr>
<td>The water</td>
<td>15.0%</td>
</tr>
<tr>
<td>Too close/too small lot</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

### TABLE 6

**Timber Creek Features Liked The Most**

(Could answer more than once)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate outdoor space</td>
<td>75%</td>
</tr>
<tr>
<td>Country Life</td>
<td>50%</td>
</tr>
<tr>
<td>Community feeling</td>
<td>37.5%</td>
</tr>
<tr>
<td>Quiet</td>
<td>20%</td>
</tr>
<tr>
<td>Pool and recreation</td>
<td>20%</td>
</tr>
<tr>
<td>Good for children</td>
<td>17.5%</td>
</tr>
</tbody>
</table>

Site planning is "the art of arranging buildings and other structures on the land in harmony with each other."[^34]

In neighborhood design, site planning considerations involve the arrangement of elements to provide a meaningful living environment, such as:

1. Visual continuity of the siting of buildings, streetscape, landscapes, signs, recreational facilities

[^34]: Lynch, Introduction
2. Density of development, lot size, and boundaries
3. Circulation: Vehicular traffic patterns—volume, direction, restrictions, parking; Pedestrian-paths, sidewalks
4. Architecture—size, interior and exterior layout and function, orientation, style, energy conservation factors—such as: use neighboring landforms, structures, or vegetation for winter wind/summer sun protection; minimize reflectivity of ground and building surfaces outside windows facing the summer sun; shape and orient the building shell to minimize winter wind turbulence.
5. Open Space—woodlands, gardens, river area, common land, space in front, behind, and in between buildings
6. Amenities—seating, landscaping, lighting, fences, windmills, recreation-type:active or passive-swimming pool, tennis court, play areas, tot lots, bikepaths, fields, track
7. Hazards—pollution, noise, other.\textsuperscript{35}

The physical environment of Timber Creek I is designed and engineered in such a way that it is functional, and harmonious with the natural surroundings. The initial concept was to create a series of neighborhoods with a sense of community amidst a preserved, rural setting.\textsuperscript{36} This

\textsuperscript{35} Lynch, pp.296–310; Macsai pp.3–10
design intent is successful by the figures taken from the open ended question section in which respondents liked the "country life" (50%), the community feeling (37.5%), the rural character (30.0%), and the layout of the development (15%), as was seen in previous tables in this chapter.

Timber Creek I has a density of 1.4 houses per acre; The houses are arranged around a series of four central grassed open areas, that are commonly referred to as "circles" or loops by the residents. The four loop roads provide good circulation within each neighborhood, limiting unnecessary traffic and reducing speed by the curvilinear design. The four "loops" of open space provide a sense of visual relief to the fifty-six home development and at the same time provide a sense of visual continuity. These areas are known by residents as "Circle 1", "Circle 2", etc. (Figure 4 in text)

The interior courtyard area or "circle" of each of the four areas serve as visual and social focal points in the community environment. Children play there, families meet there for barbecues and short visits- people identify with "their circle" and competition forms among the areas. Eighty percent of the residents use these central grass areas in some way and the residents that were interviewed during the survey process said that the areas were used heavily for neighborhood gatherings. (Table 7 in the text)

36 Interview- Day
The cluster layout was also mainly intended to preserve the natural vegetation and topography of the wooded ravine and creek to the east as well as orient the homes to a series of common open spaces terminating in the central area. Accessibility to the woods and creek area were major objectives; The design concept of preserving the natural amenities of the site and maintaining an open character within the community as initiated by the developers in the master plan has been followed through by the Homeowners Association, who at times require enforcement proceedings against individual residents. In addition, the Association maintains common open space and operates the recreational facilities located between the first and second circles including the swimming pool, tennis court, a hardsurface play area, and a tot lot all of which were installed at the beginning of the building in 1972. Most (80%) of the respondents feel the recreational facilities are well located and Table 7 shows how often the residents use them.

Table 7 indicates the swimming pool, and residents' yards were used quite often (once a week to over four times a week on the average weather permitting). However, the tot lot, and the river and wooded areas, were seldom used, if at all. A hypothesis of why adults do not allow their children to play in these areas could be because they want their children to play in areas closer to the home; the tot lot
TABLE 7

Respondents use of open space/recreation facilities

<table>
<thead>
<tr>
<th></th>
<th>Over 4 Times /Week</th>
<th>2-3 Times /Week</th>
<th>Once A Week</th>
<th>Never</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Swimming pool.</td>
<td>52.5 %</td>
<td>27.5 %</td>
<td>17.5 %</td>
<td>2.5 %</td>
<td>0 %</td>
</tr>
<tr>
<td>b) Tennis court.</td>
<td>5.0 %</td>
<td>7.5 %</td>
<td>42.5 %</td>
<td>45.0 %</td>
<td>0 %</td>
</tr>
<tr>
<td>c) Hardsurface play areas.</td>
<td>15.0 %</td>
<td>17.5 %</td>
<td>22.5 %</td>
<td>35.0 %</td>
<td>10.0 %</td>
</tr>
<tr>
<td>d) Tot lot.</td>
<td>10.0 %</td>
<td>22.5 %</td>
<td>17.5 %</td>
<td>47.5 %</td>
<td>2.5 %</td>
</tr>
<tr>
<td>e) Your backyard.</td>
<td>62.5 %</td>
<td>22.5 %</td>
<td>7.5 %</td>
<td>5.0 %</td>
<td>2.5 %</td>
</tr>
<tr>
<td>f) Wooded area.</td>
<td>7.5 %</td>
<td>5.0 %</td>
<td>37.5 %</td>
<td>47.5 %</td>
<td>2.5 %</td>
</tr>
<tr>
<td>g) River area.</td>
<td>5.0 %</td>
<td>0 %</td>
<td>30.0 %</td>
<td>62.5 %</td>
<td>2.5 %</td>
</tr>
<tr>
<td>h) Your frontyard.</td>
<td>52.5 %</td>
<td>3.5 %</td>
<td>5.0 %</td>
<td>0 %</td>
<td>7.5 %</td>
</tr>
<tr>
<td>i) Grass common area, or &quot;circle&quot;.</td>
<td>32.5 %</td>
<td>15.0 %</td>
<td>32.5 %</td>
<td>20.0 %</td>
<td>0 %</td>
</tr>
</tbody>
</table>

% is based on data of the number of residents who responded n= 40

might not be readily accessible, and/or the river and wood areas are not deemed areas for everyday play. Several residents said the same during the survey process. Also the fact that people said that they were satisfied with the off-center location of the recreation facilities could be attributed to the common knowledge that people will travel a distance to swim, and that most people in Timber Creek I do not play tennis regularly or allow their children to play in the tot lot if it is too far away. Perhaps the recreation facilities would be even more used if there was more variety and if the facilities were better situated. Eighty percent of the people did write in the essay section that there was adequate space for their family's needs, and the other five percent said that they thought their lots were too small.
The neighborhood concept along with the excellent amenities and recreational facilities has drawn and still does draw the potential homebuyer to this out-of-town community. The architectural style of the homes is conservative mainly in response to the conservative market of the 70's, especially in Manhattan, Kansas. The 1100-1300 square foot homes have an interior design concentration that are suited to the needs of the residents as is seen in the figures that 95% of the respondents of the questionnaire checked that they strongly agreed or agreed that the exterior house style is pleasing, and 90% checked that they strongly agreed or agreed that the interior house design is functional. (Appendix A- Questions A3A, A3b)

**Social.**

"The environment viewed in human terms is all that surrounds us and the various settings and circumstances that we experience....thus, the environment includes not only the physical, but the conceptual as well." Each person has their own special place in their housing environment that comes from their cultural association and behavior. Design can make it possible to distinguish the use and ownership of an area, thereby making it a place in which to feel

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37 Interview- Baldwin
38 Interviews/Survey of Residents
39 Kaplan, p. 3
confident and safe. Small town environments give a sense of human scale to which people can comfortably relate. This is called undermanning— that is, there are limits to the social structure and when those structures reach a particular size, they tend to be out of human scale, not attaining the positive benefits of their environment.

The values related to personal and social development—privacy, identity, territorial control, personal expression, environmental mastery, social interaction, equity, cultural expression, as well as the values related to survival—safety, security, health— are major influences in actions and reactions of inhabitants to their surroundings and can be directly affected by the designed environment. For example, a person might be alienated by the feeling that he or she does not belong in his neighborhood, due to an over association with others, a lack of territorial control, or a sense of insecurity.

The residential environment can be structured by design in relation to livability and control at both the community and individual level. Privacy is an outcome of the ability to control, and well-meaning neighbors could encroach upon another's privacy at times. The very arrangement and form of buildings can either encourage or discourage privacy. A sense of community encourages residents to actively help

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40 Newman, Defensible Space, p. 3
41 Bechtel, p. 154
"police" their neighborhood as part of their normal routine. The potential criminal perceives such a space as controlled by its residents, leaving him as an intruder easily recognized and dealt with.

Involving citizens is a method for effective communication and integration of groups in a community that otherwise have varying interests, differing cultural backgrounds and ways of life. Neighborhood councils, made up of delegated or elected residents of the area and who are trained and guided by professionals, are a very important source of getting back to reality in terms of basic values and actions of the people.

One cannot generalize behavioral information; specific information aids in effective solutions. The designer should recognize homebuyer preference and living patterns so design decisions do not conflict with them. This report will not attempt to include all the sociological aspects on Timber Creek I. Instead, the social values as perceived in the design intentions will be evaluated in comparison to resident perceptions of their neighborhood.

Socially, the designers sought to find an integration of neighborhood by way of the physical arrangement. The siting of the houses and the recreation facilities centered on a series of four "circles" or open space areas seems to bring

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[42] Newman, Defensible Space, p. 3
[43] Macsai, p.2
cohesion to the development and instills a neighborhood privacy sense. Eighty percent of the respondents of the questionnaire said that they used the grass common area, or "circle" in some capacity once a week or over that amount. (Appendix A- Question A2J) They like the neighborhood feeling that results though they might not see the physical design in the same light as it was intended. A case in point would be the covenants and rules of the Homeowners Association. It is a burden to some people to adhere to these guidelines since 22.5% of the respondents said in an open ended question that they disliked the Homeowners Association, but the people who live there are generally pleased with the success of the guidelines- as is noted with the high percentage of excellent and good ratings of the physical surroundings. (Appendix A- Questions A1A-N)

The Homeowners Association relies heavily on peer pressure to maintain its standards. It acts as a regulator of physical conditions and also of social factors when it organizes the residents to elect rotating officers and includes all residents in membership. Several times a year, the Homeowners Association initiates barbecues, community meetings, and workdays. The workdays are structured activities involving neighborhood improvements and upkeep.
CHAPTER 5

SUMMARY OF TIMBER CREEK I ANALYSIS.

Residential environments have a large impact on the quality of the resident's life, and therefore, designers and planners need to know how to create and improve communities and neighborhoods in response to people's needs. People are affected in different ways by their communities and particularly their neighborhood. The quality of a house, the layout of the neighborhood, the costs involved, the way in which the residential environment fulfills personal goals, etc. may influence attitudes, mental health, interpersonal relationships, and satisfaction with family life. "One way to obtain information about the social and behavioral components of design is to involve the ultimate occupants and users in the design process....If the architect is sensitive about the needs of the client, there will be few social and behavioral issues that will not be discussed."**

The residents of Timber Creek I were asked their opinions of Timber Creek I and the surrounding area and the services and facilities through a questionnaire. In this way, first hand information was amassed and therefore, the residents

** Macsai, p. 193

- 43 -
were prompted to consider the process and priorities that goes into community design.

The design criteria compiled by the analysis of Timber Creek I are listed below:

**Design Criteria**

**ECONOMIC ASPECTS**

1. **Design intent:** The intent of Timber Creek I was to provide housing alternatives in the Manhattan area for the average income buyer.

2. **Phasing:** Timber Creek I was built over a period of approximately seven years, in which time the building design changed from modular units to custom homes with basements.

3. **Market price:** Originally the price of homes was approximately $24,000 in 1972 with a $80,000-95,000 resale in 1984. These figures are comparable to similar style and size homes in Manhattan.

4. **Demand for housing:** The housing market demand in the Manhattan, Kansas area has been high for the past ten years, and Timber Creek I met and still does meet the housing needs of the public.

5. **Finances- interest rates, the economy:** These factors have followed the national trend for the past ten years since 1974, and are basically high, thereby effecting home values.
6. **Construction Costs:** The average cost of home construction in the Manhattan area went up by approximately $40.00 per square foot since 1972. The developers, Habitats, Inc., financed the cost of streets, sewer, and water in the Timber Creek I development.

7. **Income level of client:** The market price of Timber Creek I homes shows that the buyer might be, but is not necessarily in the middle to middle upper income bracket.

8. **Investment value- initial and over the years:** Respondents to the questionnaire state that the value of their home was and still is good.

9. **Appraisals and variation of houses:** Varies with the type of financing, lot size, house size, architecture, amenities, etc.

10. **Taxes:** Taxes in Pottawatomie County are generally low, and as the respondents to the questionnaire stated, are a strong draw to the community.

**PLANNING ASPECTS**

1. **Location- county boundaries, to transportation:** Timber Creek I is located in Blue Township, Pottawatomie County and with a major arterial access to the south of U.S. Highway 24.
2. **Land Use:** Timber Creek I has a zoning for single family residential development amidst agricultural and mixed-agricultural land uses.

3. **Development patterns—Commercial and agricultural activity:** Conflict between community development and agriculture is resolved through standards that have to be met before development can occur. Some of the housing development standards are siting in correct response to floodplains, transportation facilities, internal improvements, county services, agricultural and timber lands.

4. **Population:** The growth rate of Blue Township and of the entire area around Manhattan is expected to increase over the next decade. Studies of the trends, projections and growth and death rates aid in determining the viability.

5. **Future land use objectives:** Potential community development is determined by the criteria such as, access, topography, transportation facilities, sanitation capability, agricultural conflict, and overall rational location.

**PHYSICAL ASPECTS**

1. **Design intent:** The physical environment of Timber Creek I is designed and engineered in such a way that it is functional, and harmonious with the natural surroundings.
2. **Site analysis:** surface and underground water, vegetation, weather and climate, solar and wind patterns, wildlife, views

3. **Utilities and services:** telephone, post office, schools, fire and police protection, health care facilities, streets, snow removal, refuse pick up, parking

4. **Site planning:** Site planning of Timber Creek I involved the considerations of the visual continuity of buildings, streetscape, landscapes, recreational facilities, and signs. The rural setting was preserved and is well liked by the residents; the cluster layout saves the natural vegetation and topography of the wooded ravine and creek.

5. **Density of development:** Timber Creek I has fifty-six homes on a forty acre site resulting in an overall density of 1.4 homes per acre. The homes are arranged around a series of four central grassed open areas thereby creating smaller lots and a community sense.

6. **Circulation:** The vehicular traffic patterns are carefully designed to limit unnecessary traffic and to reduce speed. The four roads or "loops" as they are commonly called, form courtyards that are heavily used by the residents. Nearly half of the respondents of the questionnaire stated that quest
parking was inadequate, however. Also, there are no sidewalks in the development.

7. **Architecture**: The style of the homes is conservative mainly in response to the conservative market of the 70's and especially in Manhattan, Kansas. The 1100-1300 square foot homes are well liked for the interior and exterior style and functional quality. People considered the cost to be a determining factor in choosing Timber Creek I.

8. **Energy Conservation Factors, such as**: Timber Creek's design uses neighboring landforms, structures, or vegetation for winter wind/summer sun protection; minimizes the reflectivity of ground and building surfaces outside windows facing the summer sun; shapes and orients the building shell to minimize winter wind turbulence.

9. **Open Space**: The woodlands to the east on the site are common areas for all of the residents, as also is the recreation area, and the grassed open spaces in the middle of the loop road system and beyond the boundaries of the individual properties behind and inbetween homes. The Homeowners Association maintains these areas.

10. **Recreation**: The recreational facilities are located between the first and second circles and include a swimming pool, tennis court, play areas, and a tot
lot. Respondents state that the facilities are well sited, but swimming pool only was used often.

11. **Amenities**: landscaping; there is no lighting; fence style and placement is determined by the Homeowners Association.

12. **Hazards**: pollution, noise

**SOCIAL ASPECTS**

1. Values related to **survival**, e.g. safety, security, health.

2. Values related to **comfort** (or lack of stress), e.g. spaciousness, quietness, light, cleanliness, ease of movement.

3. Values related to **efficiency**, e.g. accessibility, convenience, orientation, information.

4. Values related to **personal development**, e.g. privacy, identity, territorial control, personal expression, environmental mastery.

5. Values related to **social development**, e.g. social interaction, equity, cultural expression.

6. Values related to **environmental administration**, e.g. management efficiency, economy, adaptability.\(^5\)

7. **Neighborhood organizations/ Homeowners association:**

**Socioeconomic characteristics of the Timber Creek I user:**

\(^5\) Ben-Elia, p.25
1. age: 42.5% are 25-34 years old, 42.5% are 35-44 years old, 10% are 45-54 years old, 2.5% are 65-74 years old, and 2.5% did not answer
2. sex: 47.5% of the respondents were men, 35% of the respondents were women, and 10% both male and female together responded.
3. occupation: housewife 10%, designer 12.5%, service 10%, sales 7.5%, university 15%, manager 25%, secretary 7.5%, skilled laborer 5%.
4. lifestyle
5. married status: married 80%, single 2.5%, divorced/widowed 10%, did not answer 7.5%.
6. education
7. family size
8. goals

Choice factors:
1. Near job
2. Location and quality of schools
3. Location and quality of shopping
4. Nice community
5. Near family and/or friends
6. Taxes
7. Architecture
8. Cost
9. Size/appearance/design of house
10. Size of lot
11. "Territorial" behavior
12. Community/neighborhood feeling
13. Recreational facilities
14. Services and utilities
15. Traffic on streets
16. Private territory
17. Cooperative territory
18. Size of town

Finally, it is hoped that the criteria presented in this analysis of the planning and design of Timber Creek I, will be beneficial to other communities. This study has limitations in scope as well as method; The research design is disadvantageous in its limitation for assessing the extent and direction of change since there is no other data set for comparison. Also, the study focuses on one and sometimes two adult members of each sampled household; the same views might not be shared by younger members.

The sense of community and satisfaction with one's residential environment is dependent upon the individual and the physical, planning, economic, and social aspects. The quality of life in any community should and can meet a person's needs and preferences and encourage satisfaction and growth. Satisfaction of housing and community is hard to measure because it is subjective to the opinions of
people, and yet through an analysis such as this one, planners and designers can see how the planning and design process occurs, and how the people use the residential development.

**RECOMMENDATIONS**

Citizen commitment and satisfaction are important in determining the health of a neighborhood. People need and desire a quality of life that is in keeping with their standards. Social values underlie what a person expects of a residential area, and differing family status has an effect on one's environmental values. Thus, defining a neighborhood is dependent on the attitudes and perceptions of the people who live there, and how one person sees the residential environment might be very different than how another sees the same place. However, there does seem to be a universal preference for a comprehensible environment since this opens up avenues for people's involvement and for the claiming and sharing of territory.

Consideration of territorial rights is an integral part of neighborhood design. A person's home is one's own place in the world, a safe get-away from the rest of society. In light of the Timber Creek I study, a certain feeling of community is found to be important, and residents enjoy the neighborhood and its rural, country setting.
There are varied parts about the total design concept that Timber Creek I residents like, such as: low cost of housing and taxes, the swimming pool, the grass common areas, the visual amenity of the woods, the lands and their interior and exterior housestyle, and so on. However, other design details could be handled differently in the opinion of this writer and according to what the people said in the questionnaire. Some of the details that could be changed to create a more pleasant environment are: additional guest parking facilities; landscaping to add more privacy and character to individual homes as well as to the housing development in general, that is, to use conifers and other vegetation to buffer and screen side or back yards that look onto public roads, or for close together residential lots; more tot lots located around the neighborhood; more and varied recreational facilities. The following scenarios add to the existing design of Timber Creek I or redesign the site in various ways given the needs of the consumer and the market today in 1984.

**REVISED RECREATION DESIGN - I**

The concept of this design is to revise the original Timber Creek I site plan to include more landscaping, guest parking, and especially recreation facilities. These design changes, seen in Figure 5, are justified by the results of the questionnaire and have evolved from the process of analyzing Timber Creek I in this report.
It is recommended that coniferous vegetation be planted to buffer and screen individual lots to add to the privacy of the homeowner and to enhance the feeling of enclosure of community space. Also, landscaping beds and gardens would be located in central grassy areas to give these "circles" character. More and ample vegetation and gardens in the central area open spaces gives the circles a change in appearance, provides protection from winter winds and summer sun, and gives relief to the expanses of roads and turf.

The conifers would be a part of a phased system of improvements; included in the first phase could be the addition of twenty parking spaces for guest use. The second phase would be to dot tot lots around the site in public central areas, since that is where parents allow their children to play at the present time. The trail system networking around the site, the sloped amphitheater on the banks of Elbo Creek, and the addition of the picnic area would be part of this phase at relatively low cost to the residents. All three suggestions have great potential to be heavily used, given the characteristics and use of the existing neighborhood.

A community building, built in the third phase, could act as a central community meeting place to bring people together. It's location in the eastern, central part of the Timber Creek I site makes an ideal incentive to draw residents to the beauty of the woods and ravine area. Then,
in the final phase, a lake would be built in the meandering
creek and a gazebo that overlooks the lake and ravine would
be built also to add to the amenities of the housing
development.

**LOOP AND TRAIL DESIGN – II**

This design retains the neighborhood loop idea of Timber
Creek I, but arranges a triple loop system in such a way as
to cover more area of the 40 acre site, thereby increasing
the number of homes to 61. The major advantages of this
alternative delineated in Figure 6 are: It is more
economically profitable to add five homes to the site
without significantly raising the linear footage of the
road; A more cohesive idea of community would occur because
there are only three central areas situated within the loop
road network that are larger in size, have more and varied
activity areas in them, and are linked by the trail system.

The trail system is interconnected by right-of-ways
between residential lots and through the central grassy
areas that lead to the common open space areas. These areas
would be used for recreation, gardening, picnicing,
exercising, and whatever else. The trail network acts as a
communications and social link that is organizational as well
as functional. Again, a community building and lake would
add to the residential community amenities. The lake would
be used for swimming, since a pool is not designed into this
scenario.
PLANNED UNIT DEVELOPMENT DESIGN - III

This design, in Figure 7, allows a new and different experience to occur on the Pottawatomie County site. The school and commercial area combine with the residential use, and it is the system of open spaces amidst the duplexes and townhouses that complete the idea of the "total" community in the country. The concept is entirely new to the Timber Creek site, and given today's housing market, it is an economically feasible alternative.

This scenario has several uses on the site—commercial, school, residential in various types, and recreation. Less of the site is built up with residential units, thus creating a blend of development with exciting possibilities for use.
CONCLUSION.

The alternatives for the design of Timber Creek I are many. These designs that are presented here show some changes that could happen, and as always, the goal is to improve the quality of life. Timber Creek I appears to be a healthy residential environment, yet perhaps the Homeowners Association could encourage the phased addition of recreational facilities, guest parking, and landscaping for the benefit of the residents and the area.

In short, some major considerations in designing a residential environment are:

Provision of the needs of people, and meeting and acceptance of societal goals to obtain an environment that is:

1. Safe/ One has confidence within it
2. Exciting
3. Stimulating
4. Allows for socializing
5. Advantageous to quality of life

Creation or aiding in a "Neighborhood or community" feeling

1. Through physical arrangement of houses and streets: Combination of private, semi-private, public, and semi-public spaces; Various uses of land- commercial, residential, school, recreation, open space; Size of lots/ location/placement
2. By encouraging creativity and individuality of homes and neighborhood

3. Looking at cultural norms and expressions

4. Fostering a spirit of cooperativeness

**Accommodation of the desires of people**

1. Environment that is comfortable, lack of stress, spacious, quiet, light, clean, ease of movement

2. Environment that is efficient, accessible, convenient, informative

3. Management that is efficient, economically feasible, adaptable

**Facilitation of personal development of people**

1. Privacy/identity

2. Territorial control

3. Personal expression

4. Environmental mastery

**In harmony with natural forces**

1. Sun, weather, climate

2. Water

3. Wildlife

The design and planning of community neighborhoods involves the many and interrelated factors of economic, planning, physical, and social considerations. The questions, what makes a neighborhood, and where do people prefer to live, could easily have a multitude of answers. The constant change and evolving of the neighborhood
warrants a close watch on the evaluation of communities through studies such as this one. It is hoped that good quality of neighborhood community planning and design can aid in increasing the quality of life.
BIBLIOGRAPHY


Blanton, Jim A. Telephone Interview. 9 April 1984.


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Appendix A

RESIDENTIAL SATISFACTION QUESTIONNAIRE AND RESULTS
March 14, 1984

Dear Timber Creek Resident,

Residential environments are an important part in people's lives. For this reason, planners and designers need to know about housing preferences and opinions about services and facilities.

You and your family are being asked to give your opinions about Timber Creek and the surrounding area, as are the other residents in this development. Your participation is very important for a true representation of your neighborhood and it is entirely voluntary. Within the next few days, I will be stopping by your house to pick up the completed questionnaire that should take about 15 minutes to fill out. If by chance it is an inconvenient time for me to stop by, please tell me then and I will be happy to call back later.

Any information you give will be entirely confidential. Feel free not to answer any questions that you do not wish to or to withdraw at any time. The questionnaire has instructions at the beginning of each section. If you have any questions call me at (913) 532-3149 or ask me when I pick up this questionnaire in the next week. Thank you for your assistance and see you soon.

Very sincerely yours,

Barbara Bonanni, MSW
Graduate Student
**TIMBER CREEK RESIDENTIAL SATISFACTION QUESTIONNAIRE**

Planners and designers concerned with designing communities in which people want to live need to better understand how people see their housing development and its facilities and services, and how it fits into the county. Please rate the adequacy of the following according to the scale—Excellent, good, fair, poor, or can't judge. Check one response rating for each question.

**A-1) WHAT IS THE ADEQUACY OF:**

<table>
<thead>
<tr>
<th></th>
<th>Can't</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Flow of vehicular traffic in the development.</td>
<td>0</td>
<td>0</td>
<td>12.5</td>
<td>47.5</td>
<td>40.0</td>
</tr>
<tr>
<td>b) Guest parking.</td>
<td>0</td>
<td>0</td>
<td>42.5</td>
<td>32.5</td>
<td>20.0</td>
</tr>
<tr>
<td>c) Pedestrian safety.</td>
<td>0</td>
<td>0</td>
<td>10.0</td>
<td>27.5</td>
<td>55.0</td>
</tr>
<tr>
<td>d) Highways and roads to stores/surrounding towns</td>
<td>0</td>
<td>0</td>
<td>10.0</td>
<td>10.0</td>
<td>32.5</td>
</tr>
<tr>
<td>e) Landscaping.</td>
<td>0</td>
<td>0</td>
<td>2.5</td>
<td>17.5</td>
<td>65.0</td>
</tr>
<tr>
<td>f) Parks/recreational facilities.</td>
<td>0</td>
<td>0</td>
<td>5.0</td>
<td>17.5</td>
<td>52.5</td>
</tr>
<tr>
<td>g) Waste treatment center.</td>
<td>0</td>
<td>0</td>
<td>5.0</td>
<td>35.0</td>
<td>45.0</td>
</tr>
<tr>
<td>h) Sewage system.</td>
<td>0</td>
<td>0</td>
<td>2.5</td>
<td>7.5</td>
<td>42.5</td>
</tr>
<tr>
<td>i) Fire protection.</td>
<td>0</td>
<td>0</td>
<td>15.0</td>
<td>35.0</td>
<td>20.0</td>
</tr>
<tr>
<td>j) Police protection.</td>
<td>0</td>
<td>0</td>
<td>7.5</td>
<td>35.0</td>
<td>32.5</td>
</tr>
<tr>
<td>k) Educational services.</td>
<td>0</td>
<td>0</td>
<td>10.0</td>
<td>7.5</td>
<td>57.5</td>
</tr>
<tr>
<td>l) Emergency medical and health care services.</td>
<td>0</td>
<td>0</td>
<td>20.0</td>
<td>27.5</td>
<td>12.5</td>
</tr>
<tr>
<td>m) Water supply.</td>
<td>0</td>
<td>0</td>
<td>15.0</td>
<td>17.5</td>
<td>42.5</td>
</tr>
<tr>
<td>n) Refuse pick-up.</td>
<td>0</td>
<td>0</td>
<td>2.5</td>
<td>42.5</td>
<td>55.0</td>
</tr>
</tbody>
</table>

**Important Note for entire questionnaire:** Numbers in the boxes are the percentage of the 40 residents who responded.
Another important part in understanding the kinds of communities people want has to do with how they use their environment and facilities. This next section asks for a count of how many times a week you and/or your family use the outdoor areas and recreation facilities in Timber Creek. Please check only one answer for each question according to an estimated average for your family.

A-2) How often do you use these outdoor areas and recreation facilities when the weather permits?

<table>
<thead>
<tr>
<th></th>
<th>Once</th>
<th>2-3 Times</th>
<th>Over 4 Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never/Week</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Swimming pool.</td>
<td>2.5</td>
<td>17.5</td>
<td>27.5</td>
</tr>
<tr>
<td>b) Tennis court.</td>
<td>45.0</td>
<td>42.5</td>
<td>7.5</td>
</tr>
<tr>
<td>c) Hardsurface play areas.</td>
<td>35.0</td>
<td>22.5</td>
<td>17.5</td>
</tr>
<tr>
<td>d) Tot lots.</td>
<td>47.5</td>
<td>17.5</td>
<td>22.5</td>
</tr>
<tr>
<td>e) Your backyard.</td>
<td>5.0</td>
<td>7.5</td>
<td>22.5</td>
</tr>
<tr>
<td>f) Wooded area.</td>
<td>47.5</td>
<td>37.5</td>
<td>5.0</td>
</tr>
<tr>
<td>g) River area.</td>
<td>62.5</td>
<td>30.0</td>
<td>0</td>
</tr>
<tr>
<td>h) Your frontyard.</td>
<td>0</td>
<td>5.0</td>
<td>3.5</td>
</tr>
<tr>
<td>i) Grass common area/circle</td>
<td>20.0</td>
<td>32.5</td>
<td>15.0</td>
</tr>
</tbody>
</table>
Next, please answer the following statements according to the given opinion scale using one check per statement.

A-3) I FEEL THAT:

<table>
<thead>
<tr>
<th></th>
<th>Strong Agree</th>
<th>Agree</th>
<th>Don't Know</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) The exterior house style is pleasing.</td>
<td>122.5</td>
<td>72.5</td>
<td>0</td>
<td>5.0</td>
<td>0</td>
</tr>
<tr>
<td>b) The interior house design is functional.</td>
<td>130.0</td>
<td>60.0</td>
<td>0</td>
<td>7.5</td>
<td>0</td>
</tr>
<tr>
<td>c) My home gets adequate interior sunlight.</td>
<td>25.0</td>
<td>52.5</td>
<td>2.5</td>
<td>17.5</td>
<td>2.5</td>
</tr>
<tr>
<td>d) My home gets adequate sunlight for gardens.</td>
<td>30.0</td>
<td>47.5</td>
<td>15.0</td>
<td>15.0</td>
<td>0</td>
</tr>
<tr>
<td>e) Land in the development is well-maintained.</td>
<td>145.0</td>
<td>50.0</td>
<td>5.0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>f) The recreation facilities are located well.</td>
<td>22.5</td>
<td>57.5</td>
<td>5.0</td>
<td>12.5</td>
<td>0</td>
</tr>
<tr>
<td>g) Initially, I got a good real estate investment value, relative to others in Manhattan.</td>
<td>140.0</td>
<td>52.5</td>
<td>2.5</td>
<td>2.5</td>
<td>0</td>
</tr>
<tr>
<td>h) In the past years, I feel I have a good real estate investment, relative to others in Manhattan.</td>
<td>35.0</td>
<td>45.0</td>
<td>15.0</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>i) I am basically satisfied with my home.</td>
<td>35.0</td>
<td>57.5</td>
<td>17.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>j) I am basically satisfied with Timber Creek.</td>
<td>37.5</td>
<td>57.5</td>
<td>2.5</td>
<td>2.5</td>
<td>0</td>
</tr>
</tbody>
</table>
Choose three answers for each of the following questions.

A-4 a) WHAT ARE THE THREE REASONS FOR YOUR SELECTION OF POTTAWATOMIE COUNTY AS A LOCATION FOR YOUR FAMILY HOME?

Near job
Good shopping
Good schools
Nice community
Near friends/family
Low taxes
Other: Specify below

Did not answer

b) WHAT ARE THREE REASONS FOR YOUR SELECTION OF THIS HOUSE IN TIMBER CREEK?

Cost
Size of house
Size of lot
Design of house
Appearance of house
"Neighborhood" feeling
Recreation facilities
Only place available
Other: Specify below

Did not answer
C) Which three of the items listed below would you consider most important in selecting a new home?

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of lot</td>
<td>0</td>
</tr>
<tr>
<td>Cost</td>
<td>0</td>
</tr>
<tr>
<td>Traffic on streets</td>
<td>5.0</td>
</tr>
<tr>
<td>Location and quality of schools</td>
<td>17.5</td>
</tr>
<tr>
<td>Number of bedrooms</td>
<td>25.0</td>
</tr>
<tr>
<td>Convenient to recreation</td>
<td>7.5</td>
</tr>
<tr>
<td>Close to work</td>
<td>20.0</td>
</tr>
<tr>
<td>Close to family/friends</td>
<td>0</td>
</tr>
<tr>
<td>Close to shopping area</td>
<td>5.0</td>
</tr>
<tr>
<td>Other: Specify below</td>
<td>20.0</td>
</tr>
</tbody>
</table>
This, the last portion, is left open for your opinions and any comments you would like to add.

B-1) Open-ended questions:

a) What features about Timber Creek do you like the most?

b) What features about Timber Creek do you dislike the most?

c) What features about Pottawatomie County do you like the most?

d) What features about Pottawatomie County do you dislike the most?

e) Is there enough outdoor space for your family's needs?

f) Who lives here?

Finally, here are a few questions about yourself to help interpret the results.

C-1) HOW MANY YEARS HAVE YOU LIVED IN YOUR PRESENT COMMUNITY OR TOWNSHIP?

<table>
<thead>
<tr>
<th></th>
<th>0-2</th>
<th>3-5</th>
<th>6-10</th>
<th>11-20</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.0%</td>
<td>25.0%</td>
<td>40.0%</td>
<td>12.5%</td>
<td>2.5%</td>
<td></td>
</tr>
</tbody>
</table>
C-2) DO YOU RENT OR OWN THIS HOUSE?

Own | 2.5%
Rent | 92.5%

C-3) TO WHICH AGE GROUP DO YOU BELONG:

| 18-24 | 0%
| 25-34 | 42.5%
| 35-44 | 42.5%
| 45-54 | 10.0%
| 55-64 | 0%
| 65-74 | 2.5%
| 75+   | 0%

Did not answer | 2.5%

C-4) WHAT IS YOUR PRIMARY OCCUPATION?

C-5) HOW MANY YEARS HAVE YOU BEEN EMPLOYED IN THIS OCCUPATION?

| 0-2 |
| 3-5 |
| 6-10 |
| 11-20 |
| 20 |
C-6) How many years of schooling have you completed?

Elementary school
Secondary school
Junior college
Vocational or trade school
University
Graduate school

C-7) What is your marital status?

Single
Married
Divorced/Widowed
Did not answer

C-8) What is your gender?

Male
Female
Both Answered
Did not Answer

Thank-you, Barbara Bonanni
Appendix B

HOMEOWNERS ASSOCIATION DOCUMENTS AND HOMEOWNERS COVENANTS
June 16, 1972

Home Owners Association Responsibilities
Timber Creek Community
Manhattan, Kansas 66502

(1) General maintenance and upkeep of common recreation facilities including swimming pool, community structures, paths, hardsurface play areas, tot lots, etc.

(2) General lawn and plant material maintenance of common areas including fertilizing, mowing, pruning, watering, and other work incidental to insure a good visual appearance.

(3) General lawn and plant material maintenance upon each lot outside all fenced areas including fertilizing, mowing, pruning and other work incidental to insure a good visual appearance. The home owner will be responsible for lawn and plant material care inside fenced areas. The home owner will also be responsible for watering of lawn and plant materials upon his individual lot. The home owner can maintain lawn areas and plant materials upon his individual lot if desired; however such maintenance shall in no way reduce fees due the Association.

(4) Snow removal as necessary from individual driveways and community streets. Home owners will be responsible to move any vehicles blocking snow clearing operations.

(5) Trash pickup once weekly, the day of pickup to be designated by the Association. The home owner will be responsible to set out any trash to be removed.

(6) General maintenance and upkeep of the water treatment plant, sewage disposal plant and associated utilities as assigned by and in accordance with policy determined by the Pottawatomie County Commissioners and the Kansas State Board of Health.

(7) Keeping of all Association records, policy, financial records, collection and dispersal of funds as directed, notification of membership as directed, employment of staff, and other managerial responsibilities incidental and necessary to Association operations.

(8) Enforcement of protective covenants and Association policy.

In the event that the need for maintenance or repair is caused through the willful or negligent act of the Owner, his family or guests, or invitees, the cost of such maintenance or repairs shall be added to and become a part of the assessment to which such lot is subject.
In the event an owner shall fail to maintain his property, including the dwelling, and attached accessories, in a manner satisfactory to the Board of Directors, the Association, after approval by two-thirds (2/3) vote of the Board of Directors, shall have the right, through its agents and employees, to enter upon said parcel and to repair, maintain, and restore the exterior of the buildings and any other improvements erected thereon. The cost of such exterior maintenance shall be added to and become part of the assessment to which such Lot is subject.

All streets and street right of ways shall be dedicated to Pottawatomie County, the maintenance to be under the jurisdiction of the County Engineer, Pottawatomie County, State of Kansas.

Owners grant the Timber Creek Home Owners Association and its authorized representatives an easement across their entire lot, exclusive of the area covered by the dwelling unit, for the installation, repair, and maintenance of utilities, drainage facilities, trash pickup, care of plantings and lawns, etc.

Habitats, Inc. will assist the Home Owners Association to meet its responsibilities during the initial stages of development. Complete control and ownership of common facilities and open space shall be transferred to the Association at the project completion of sixty (60) homes or five (5) years, whichever occurs first.
BY-LAWS
of
Timber Creek East Homeowners Association, Inc.

Article I. Name and Location.

The name of the Corporation is Timber Creek East Homeowners Association, Inc., hereinafter referred to as the "Corporation." The principal office of the Corporation shall be located at Timber Creek Addition, Manhattan, Pottawatomie County, Kansas 66502, but meetings of members and directors may be held at such places within the State of Kansas, County of Pottawatomie, as may be designated by the Board of Directors.

Article II. Definitions.

Section 1. "Corporation" shall mean and refer to Timber Creek East Homeowners Association, Inc., its successors and assigns.

Section 2. "Properties" shall mean and refer to that certain real properties described in the Declaration of Covenants, Conditions and Restrictions, and such additions thereto as may hereafter be brought within the jurisdiction of the Corporation.

Section 3. "Common area" shall mean all real property owned by the Corporation for the common use and enjoyment of the owners.

Section 4. "Lot" shall mean and refer to any plot of land shown upon any recorded sub-division map of the properties with the exception of the common area.

Section 5. "Owner" shall mean and refer to the record owner, whether one or more persons or entities, of the fee simple title to any lot which is a part of the properties, including contract sellers, but excluding those having such interest merely as security for the performance of an obligation.

Section 6. "Declarant" shall mean and refer to Habittats, Inc., its successors and assigns if such successors or assigns should acquire more than one undeveloped lot from the Declarant for the purpose of development.

Section 7. "Declaration" shall mean and refer to the Declaration of Covenants, Conditions and Restrictions applicable to the properties recorded in the office of the Register of Deeds, Pottawatomie County, Kansas, Book No. ____, page No. ____.

Section 8. "Member" shall mean and refer to those persons entitled to membership as provided in the Articles of Incorporation of Timber Creek East Homeowners Association, Inc.
By-Laws continued:

Article III. Meeting of Members.

Section 1. Annual Meetings.

The first annual meetings of the members shall be held within thirteen months from the date of incorporation of the Corporation, and each subsequent annual meeting of the members shall be held on the third Friday of September, of each year thereafter, at the hour of 8:00 o'clock P.M. If the day for the annual meeting of the members is a legal holiday, the meeting will be held at the same hour on the first day following which is not a legal holiday or weekend.

Section 2. Special Meetings.

Special meetings of the members may be called at any time by the Board of Directors or upon written request of the members who are entitled to vote one-fourth (1/4) of all the votes of the Class A membership.

Section 3. Notice of Meetings.

Written notice of each meeting of the members shall be given by, or at the direction of, the secretary or person authorized to call the meeting, by public notice displayed openly at several points throughout the community at least fifteen days before such meeting. Such notice shall specify the place, day and hour of the meeting, and in the case of a special meeting, the purpose of the meeting.

Section 4. Quorum.

The presence at the meeting of members entitled to cast, or of proxies entitled to cast, one-tenth (1/10) of the votes of each class of membership, shall constitute a quorum for any action except as otherwise provided in the Articles of Incorporation, the Declaration, or these By-Laws. If, however, such quorum shall not be present or represented at any meeting, members entitled to vote thereat shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum as aforesaid shall be present or be represented.

Section 5. Proxies.

At all meetings of members, each member may vote in person or by proxy. All proxies shall be in writing and filed with the secretary. Every proxy shall be revocable and shall automatically cease upon conveyance by the member of his lot.

Article IV. Board of Directors: Selection: Term of Office.

Section 1. Number.
By-Laws continued:

As provided in the Articles of Incorporation, the affairs of this Corporation shall be managed by a Board of Directors, the number of which shall be not more than seven (7) nor less than three (3), who need not be members of the Corporation.

Section 2. Term of Office.

At the first annual meeting, the members shall elect one (1) director for a term of one (1) year, at least one (1) but not more than two (2) directors for a term of two (2) years, and at least one (1) and not more than four (4) directors for a term of three (3) years; and at each annual meeting thereafter, the members shall elect directors to fill any expired or unfilled directorship. The Board of Directors shall appoint a president, vice-president and secretary-treasurer at the first annual meeting and at each annual meeting thereafter.

Section 3. Removal.

Any director may be removed from the Board, with or without cause, by a two-thirds (2/3) vote of the members of the Corporation. In the event of death, resignation or removal of a director, his successor shall be selected by the remaining members of the Board and shall serve for the unexpired term of his predecessor.

Section 4. Compensation.

No director shall receive any compensation for any service he may render to the Corporation. However, any director may be reimbursed for his actual expenses incurred in the performance of his duties.

Section 5. Action Taken Without a Meeting.

The directors shall have the right to take any action in the absence of a meeting which they could take at a meeting by obtaining the written approval of all the directors. Any action so approved shall have the same effect as though taken at a meeting of the directors.

Article V. Nomination and Election of Directors.

Section 1. Nomination.

After the first annual meeting, nomination for election to the Board of Directors shall be made by a nominating committee. Nominations may also be made from the floor at the annual meeting. The nominating committee shall consist of a chairman, who shall be a member of the Board of Directors, and two or more members of the Corporation. The nominating committee shall be appointed
By-Laws continued:

by the Board of Directors prior to its annual meeting of the members, to serve from the close of such annual meeting until the close of the next annual meeting and such appointment shall be announced at each annual meeting. The nominating committee shall make as many nominations for election to the Board of Directors as it shall, in its discretion, determine but not less than the number of vacancies that are to be filled. Such nominations may be made from among members or non-members.

Section 2. Election.

Election to the Board of Directors shall be by secret written ballot. At such election, the members or their proxies may cast, in respect to each vacancy, as many votes as they are entitled to exercise under the provisions of the Articles of Incorporation. The persons receiving the largest number of votes shall be elected. Cumulative voting is not permitted.

Article VI. Meetings of Directors.

Section 1. Regular Meetings.

Regular meetings of the Board of Directors shall be held monthly without notice, at such place and hour as may be fixed from time to time by resolution of the Board.

Section 2. Special Meetings.

Special meetings of the Board of Directors shall be held when called by the president of the Corporation, or by any two directors, after not less than three (3) days’ notice to each director.

Section 3. Quorum.

A majority of the number of directors shall constitute a quorum for the transaction of business. Every act or decision done or made by a majority of the directors present at a duly held meeting at which a quorum is present shall be regarded as the act of the Board.

Article VII. Powers and Duties of the Board of Directors.

Section 1. Powers.

The Board of Directors shall have power to:

(a). Adopt and publish rules and regulations governing the use of the Common area and facilities, and the personal conduct of the members and their guests thereon, and to establish penalties for the infraction thereof;
By-Laws continued:

(b). Suspend the voting rights and right to use the recreational facilities of a member during any period in which such member shall be in default in the payment of any assessment levied by the Corporation. Such rights may also be suspended after notice and hearing, for a period not to exceed sixty (60) days for infraction of published rules and regulations;

(c). Exercise for the Corporation all powers, duties and authority vested in or delegated to this Corporation and not reserved to the membership by the provisions of these By-Laws, the Articles of Incorporation, or the Declaration;

(d). Declare the office of a member of the Board of Directors to be vacant in the event such member shall be absent from three (3) consecutive regular meetings of the Board of Directors; and

(e). Employ a manager, an independent contractor, or such other employees as they deem necessary, and to prescribe their duties.

Section 2. Duties.

It shall be the duty of the Board of Directors to:

(a). Cause to be kept a complete record of all its acts and Corporate affairs and to present a statement thereof to the members at the annual meeting of the members, or at any special meeting when such statement is requested in writing by one-fourth (1/4) of the Class A members who are entitled to vote;

(b). Supervise all officers, agents and employees of this Corporation, and to see that their duties are properly performed;

(c). As more fully provided in the Declaration, to:

(1). Fix the amount of the annual assessment against each lot at least thirty (30) days in advance of each annual assessment;

(2). Send written notice of each assessment to every owner subject thereto at least thirty (30) days in advance of each annual assessment period; and

(3). Foreclose the lien against any property for which assessments are not paid within thirty (30) days after due date or to bring an action at law against the owner personally obligated to pay the same.

(d). Issue, or cause an appropriate officer to issue, upon demand by any person, a certificate setting forth whether or not any assessment has been paid. A reasonable charge may be made by the Board for the issuance of these certificates. If a certificate states an assessment has been paid, such certificate shall be
By-Laws continued:

conclusive evidence of such payment:

(e). Procure and maintain adequate liability and hazard insurance on property owned by the Corporation;

(f). Cause all officers or employees having fiscal responsibilities to be bonded, as it may deem appropriate;

(g). Cause the common area and common facilities to be maintained.

Article VIII. Officers and Their Duties.

Section 1. Enumeration of Offices.

The officers of this Corporation shall be a president, vice-president, who shall at all times be members of the Board of Directors, and a secretary-treasurer and such other officers as the Board may, from time to time, by resolution create.

Section 2. Election of Officers.

The election of officers shall take place at the first meeting of the Board of Directors following each annual meeting of the members.

Section 3. Term.

The officers of this Corporation shall be elected annually by the Board and each shall hold office for one (1) year unless he shall sooner resign, or shall be removed or otherwise disqualified to serve.

Section 4. Special Appointments.

The Board may elect such other officers as the affairs of the Corporation may require, each of whom shall hold office for such period, have such authority, and perform such duties as the Board may, from time to time, determine.

Section 5. Resignation and Removal.

Any officer may be removed from office with or without cause by the Board. Any officer may resign at any time giving written notice to the Board, the president or the secretary. Such resignation shall take effect on the date of receipt of such notice or at any later time specified therein, and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 6. Vacancies.
By-Laws continued:

A vacancy in any office may be filled by appointment by the Board. The officer appointed to such vacancy shall serve for the remainder of the term of the officer he replaces.

Section 7. Multiple Offices.

The offices of secretary and treasurer may be held by the same person. No person shall simultaneously hold more than one of any of the other offices except in the case of special offices created pursuant to Section 4 of this Article.

Section 8. Duties.

The duties of the officers are as follows:

(a) President. The president shall preside at all meetings of the Board of Directors; shall see that orders and resolutions of the Board are carried out; shall sign all leases, mortgages, deeds and other written instruments, and shall co-sign all checks and promissory notes.

(b) Vice-President. The vice-president shall act in the place and stead of the president in the event of his absence, inability or refusal to act, and shall exercise and discharge such other duties as may be required of him by the Board.

(c) Secretary. The secretary shall record the votes and keep the minutes of all meetings and proceedings of the Board and of the members; keep the corporate seal of the Corporation and affix it on all papers requiring said seal; serve notice of meetings of the Board and of the members; keep appropriate current records showing the members of the Corporation, together with their addresses, and shall perform such other duties as may be required by the Board.

(d) Treasurer. The treasurer shall receive and deposit in appropriate bank accounts all monies of the Corporation and shall disperse such funds as directed by resolution of the Board of Directors; shall sign all checks and promissory notes of the Corporation; keep proper books of account; cause an annual audit of the Corporation books to be made by a public accountant at the completion of each fiscal year; and shall prepare an annual budget and a statement of income and expenditures to be represented to the membership at its regular annual meeting.

Article IX. Committees.

The Board of Directors shall appoint such committees as deemed appropriate in carrying out the purposes of the Corporation.

Article X. Books and Records.

The books, records and papers of the Corporation shall at all times, during
By-Laws continued:

reasonable business hours, be subject to inspection by any member. The Declaration, the Articles of Incorporation and the By-Laws of the Corporation shall be available for inspection by any member at the principal office of the Corporation, where copies may be purchased at reasonable cost.

**Article XI. Assessments.**

As more fully provided in the Declaration, each member is obligated to pay to the Corporation annual and special assessments which are secured by a continuing lien upon the property against which the assessment is made. Any assessments which are not paid when due shall be delinquent. If the assessment is not paid within thirty (30) days after the due date, the assessment shall bear interest from the date of delinquency at the rate of six percent per annum, and the Corporation may bring an action at law against the owner personally obligated to pay the same or foreclose the lien against the property, and interest, costs and reasonable attorney's fees of any such action shall be added to the amount of such assessment. No owner may waive or otherwise escape liability for the assessments provided for herein by non-use of the common area or abandonment of his lot.

**Article XII. Corporate Seal.**

The Corporation shall have a seal in circular form having within its circumference the words: Timber Creek East Homeowners Association, Inc.

**Article XIII. Amendments.**

Section 1. These By-Laws may be amended, at a regular or special meeting of the members, by a vote of a majority of a quorum of members present in person or by proxy.

Section 2. In the case of any conflict between the Articles of Incorporation and these By-Laws, the Articles shall control; and in the case of any conflict between the Declaration and these By-Laws, the Declaration shall control.

**Article XIV. Miscellaneous.**

The fiscal year of the Corporation shall begin on the first day of January and end on the 31st day of December of every year, except that the first fiscal year shall begin on the date of incorporation.
DECLARATION
OF COVENANTS, CONDITIONS AND RESTRICTIONS
Timber Creek East Subdivision - Manhattan, Kansas

THIS DECLARATION, made on the date hereinafter set forth by
Habitats Inc., hereinafter referred to as "Declarant".

WITNESSETH:

WHEREAS, Declarant is the owner of certain property in Blue
Township, County of Pottawatomie, State of Kansas, which is more
particularly described as:

Phase I Timber Creek East Subdivision, Manhattan, Kansas

Beginning at the SW corner of the SE ¼, Section 3, Township 10,
Range 5E, in Pottawatomie County, Kansas, thence North along the
center section line 1230.75 feet, thence East approximately 481
feet to center line of Elbow Creek, thence Southwesterly along
the center line of Elbow Creek a distance of approximately 1350 feet
to a point located approximately 286 feet due East of the center
section line; thence 277 feet due South to the South quarter line;
thence due West a distance of 287 feet along the quarter section
line to the point beginning, less lots 17 and 18 as designated on
the recorded plat of Timber Creek East Subdivision, Phase I, an
area of 9.4 acres, more or less;

and to apply to phases II, III & IV more particularly described
hereinafter as such parcels are recorded and developed.

NOW THEREFORE, Declarant hereby declares that all of the
properties described above shall be held, sold and conveyed subject
to the following easements, restrictions, covenants and conditions,
which are for the purpose of protecting the value and desirability of,
and which shall run with, the real property and be binding on
all parties having any right, title or interest in the described
properties or any part thereof, their heirs, successors and assigns,
and shall inure to the benefit of each owner thereof.

ARTICLE I
DEFINITIONS

Section 1.
"Association" shall mean and refer to Timber Creek Homeowners
Association, its successors and assigns.

Section 2.
"Owner" shall mean and refer to the record owner, whether one or
more persons or entities, of a fee simple title to any Lot which
is a part of the Properties, including contract sellers, but
excluding those having such interest merely as security for the
performance of an obligation.
Section 3.
"Properties" shall mean and refer to that certain real property hereinafter described, and such additions thereto as may hereafter be brought within the jurisdiction of the Association.

Section 4.
"Common Area" shall mean all real property owned by the Association for the common use and enjoyment of the owners. The Common Area to be owned by the Association at the time of the conveyance of the first lot is described as follows:
A parcel of land designated as lot 19 on the recorded plat for Timber Creek East Subdivision, a tract encompassing 6.1 acres, more or less.

Section 5.
"Lot" shall mean and refer to any plot of land shown upon any recorded subdivision map of the Properties with the exception of the Common Area.

Section 6.
"Declarant" shall mean and refer to Habitats Inc., its successors and assigns if such successors and assigns should acquire more than one undeveloped Lot from the Declarant for the purpose of development.

ARTICLE II
PROPERTY RIGHTS

Section 1.
Owners' Easements of Enjoyment. Every owner shall have a right and easement of enjoyment in and to the Common Area which shall be appurtenant to and shall pass with the title to every Lot, subject to the following provisions:
(a) the right of the Association to charge reasonable admission and other fees for the use of any recreational facility situated upon the Common Area;
(b) the right of the Association to suspend the voting rights and right to use of the recreational facilities by an owner for any period during which any assessment against his Lot remains unpaid; and for a period not to exceed 60 days for any infraction of its published rules and regulations;
(c) the right of the Association to dedicate or transfer all or any part of the Common Area to any public agency, authority, or utility for such purposes and subject to such conditions as may be agreed to by the members. No such dedication or transfer shall be effective unless an instrument signed by two-thirds (2/3) of each class of members agreeing to such dedication or transfer has been recorded.

Section 2.
Delegation of Use. Any owner may delegate, in accordance with the By-Laws, his right of enjoyment to the Common Area and facilities to the members of his family, his tenants, or contract purchasers who reside on the property.
ARTICLE III
MEMBERSHIP AND VOTING RIGHTS

Section 1.
Every owner of a lot which is subject to assessment shall be a member of the Association. Membership shall be appurtenant to and may not be separated from ownership of any Lot which is subject to assessment.

Section 2.
Membership shall be all Owners and shall be entitled to one vote for each Lot owned. When more than one person holds an interest in any Lot, all such persons shall be members. The vote for such Lot shall be exercised as they among themselves determine, but in no event shall more than one vote be cast with respect to any Lot.

ARTICLE IV
COVENANT FOR MAINTENANCE ASSESSMENTS

Section 1.
Creation of the Lien and Personal Obligation of Assessments. Each owner of any Lot by acceptance of a deed therefor, whether or not it shall be so expressed in such deed, is deemed to covenant and agrees to pay to the Association: (1) annual assessments or charges, and (2) special assessments for capital improvements, such assessments to be established and collected as hereinafter provided. The annual and special assessments, together with interest, costs, and reasonable attorney’s fees, shall be a charge on the land and shall be a continuing lien upon the property against which each such assessment is made. Each such assessment, together with interest, costs, and reasonable attorney’s fees, shall also be the personal obligation of the person who was the Owner of such property at the time when the assessment fell due. The personal obligation for delinquent assessments shall not pass to his successors in title unless expressly assumed by them.

Section 2.
Purpose of Assessments. The assessments levied by the Association shall be used exclusively to promote the recreation, health, safety, and welfare of the residents in the Properties and for the improvement and maintenance of the Common Area, and the landscape situated upon the Properties. Following are the basic responsibilities of the Association:

(1) General maintenance and upkeep of common recreation facilities including swimming pool, community structures, paths, hardsurface play area, tot lots, etc.

(2) General lawn and plant material maintenance of common areas including fertilizing, mowing, pruning, watering, and other work incidental to insure a good visual appearance.

(3) Snow removal as necessary from community streets. Home owners will be responsible to move any vehicles blocking snow clearing operations.
(4) Trash pickup once weekly, the day of pickup to designated by the Association. The home owner will be responsible to set out any trash to be removed.

(5) General maintenance and upkeep of the water treatment plant and sewage disposal plant as assigned by and in accordance with policy determined by the Pottawatomie County Commissioners and the Kansas State Board of Health.

(6) Keeping of all Association records, policy, financial records, collection and dispersal of funds as directed, notification of membership as directed, employment of staff, and other managerial responsibilities incidental and necessary to Association operation.

(7) Enforcement of protective covenants and Association policy.

In the event that the need for maintenance or repair is caused through the willful or negligent act of the owner, his family or guests, or invitees, the cost of such maintenance or repairs shall be added to and become a part of the assessment to which such lot is subject.

Maintenance will not be provided for the dwelling, decks, fences, nor storage buildings, however, in the event an owner of any Lot in the properties shall fail to maintain the dwelling proper in a manner satisfactory to the Board of Directors, the Association, after approval by two-thirds (2/3) vote of the Board of Directors, shall have the right, through its agents and employees, to enter upon said parcel and to repair, maintain, and restore the exterior of the buildings and any other improvements erected thereon. The cost of such exterior maintenance shall be added to and become part of the assessment to which such Lot is subject.

Section 3.
Annual Assessment. October 1, 1981 shall be $240.00 per Lot (includes maintenance of common areas and facilities, snow removal, trash pickup, Association management).
(a) The annual assessment may be increased each year not more than 5% above the annual assessment for the previous year without a vote of the membership.
(b) The annual assessment may be increased above 5% by a vote of two-thirds (2/3) of the voting membership in person or by Proxy.

Section 4.
Special Assessments for Capital Improvements. In addition to the annual assessments above, the Association may levy, in any assessment year, a special assessment for the purpose of defraying, in whole or in part, the cost of any construction, reconstruction, repair or replacement of a capital improvement upon the Common Area, including fixtures and personal property related thereto, provided that any such assessment shall have the collective assent of two-thirds (2/3) of the votes of the membership who are voting in person or by proxy.
Section 5.
Notice and Quorum for Any Action Authorized Under Sections 3 and 4.
Written notice of any meeting called for the purpose of taking any action authorized under Section 3 or 4 shall be sent to all members not less than 30 days nor more than 60 days in advance of the meeting. At the first such meeting called, the presence of member or of proxies entitled to cast sixty percent (60%) of all the votes of each class of membership shall constitute a quorum. If the required quorum is not present, another meeting may be called subject to the same notice requirement, and the required quorum at the subsequent meeting shall be one-half (½) of the required quorum at the preceding meeting.

Section 6.
Uniform Rate of Assessment. Both annual and special assessments must be fixed at a uniform rate for all Lots and may be collected on a monthly basis.

Section 7.
Date of Commencement of Annual Assessments: Due Dates. The Board of Directors shall fix the amount of the annual assessment against each Lot at least thirty (30) days in advance of each annual assessment period. Written notice of the Annual assessment shall be sent to every Owner subject thereto. The due dates shall be established by the Board of Directors. The Association shall, upon demand, and for a reasonable charge, furnish a certificate signed by an officer of the Association setting forth whether the assessments on a specified Lot have been paid.

Section 8.
Effect of Nonpayment of Assessments: Remedies of the Association. Monthly assessment is due on the last day of the month. Any assessment not paid within thirty (30) days after the due date shall be considered delinquent and will be assessed a $2.00 a month late fee. The Association may bring an action at law against the Owner personally obligated to pay the same, or foreclose the lien against the property. No owner may waive or otherwise escape liability for the assessments provided for herein by non-use of the Common Area or abandonment of his Lot.

Section 9.
Subordination of the Lien to Mortgages. The lien of the assessments provided for herein shall be subordinate to the lien of any first mortgage. Sale or transfer of any Lot shall not affect the assessment lien. However, the sale or transfer of any Lot pursuant to mortgage foreclosure or any proceeding in lieu thereof, shall extinguish the lien of such assessments as to payments which became due prior to such sale or transfer. No sale or transfer shall relieve such Lot from liability for any assessments thereafter becoming due or from the lien thereof.
ARTICLE V
ARCHITECTURAL CONTROL

Architectural continuity has been a major planning consideration. No building, fence, wall or other structure; trees, shrubs; grading or excavations; signs, mail boxes or lights, other than those provided shall be commenced, erected, or maintained upon the Owners property; nor shall any exterior addition to, or change, or alteration be made until the plans and specifications showing the nature, kind, shape, height, materials, and location of such revisions or addition have been submitted to and approved in writing by two-thirds (2/3) vote of the Association Board of Directors.
In the event said Board fails to approve or disapprove such design and location within thirty (30) days after said plans and specifications have been submitted to it at a regularly scheduled meeting, approval will not be required and this Article will be deemed to have been fully complied with.

ARTICLE VI
GENERAL PROVISIONS

Section 1. Enforcement. The Association, or any Owner, shall have the right to enforce, by any proceeding at law or in equity, all restrictions, conditions, covenants, reservations, liens and charges now or hereafter imposed by the provisions of this Declaration. Failure by the Association or by any Owner to enforce any covenant or restriction herein contained shall in no event be deemed a waiver of the right to do so thereafter.

Section 2. Severability. Invalidation of any one of these covenants or restrictions by judgment or court order shall in no way affect any other provisions which shall remain in full force and effect.

Section 3. Amendment. The covenants and restrictions of this Declaration shall run with and bind the land, for a term of twenty (20) years from the date this Declaration is recorded, after which time they shall be automatically extended for successive periods of ten (10) years. This Declaration may be amended during the first twenty (20) year period by an instrument signed by not less than ninety percent (90%) of the Lot Owners, and thereafter by an instrument signed by not less than seventy-five (75%) of the Lot Owners. Any amendment must be recorded.

Section 4. Annexation. (a) Additional residential property and Common Area may be annexed to the Properties with the consent of two-thirds (2/3) of the members.
ARTICLE VII

RESTRICTIONS ON USE AND EASEMENTS

Section 1.
No wrecked, decrepit, unserviceable or unused vehicles shall be parked on driveway areas; nor shall said driveway area be used to make major repairs on automobiles or other vehicles. The parking of trucks above the one ton category or construction equipment in driveways or on streets on a continuing basis shall be prohibited.

Section 2.
Temporary parking shall be allowed on project streets for visitors and guests only. Permanent parking on streets shall be prohibited. Parking on any turf area shall be prohibited.

Section 3.
Owners may keep normal household pets. Unattended pets shall not be allowed beyond the Owner's property. Outside pens, kennels, or structures for the keeping of pets shall be allowed as provided in Article V - Architectural Control. (Article V requires a written request to the Board of Directors for written approval prior to the start of construction.)

Section 4.
Outside clothes drying shall be considered a temporary activity with all lines or portable drying devices removed when not in use.

Section 5.
Garden plots shall be allowed as long as the location, size and type of garden plot is not offensive to adjoining neighbors. Generally, the Board designates an area to the rear of the residence. Under no circumstances will garden plots be permitted in front yards.

Section 6.
Trash shall be stored in metal or plastic, leak-proof, airtight containers. Trash containers shall be stored within an enclosed or screened area. Burning of trash, grass, weeds, etc. is prohibited.

Section 7.
Owners grant the Association and its authorized representatives an easement across their entire lot, exclusive of the area covered by the dwelling unit, for the installation, repair, and maintenance of utilities, drainage facilities, trash pickup, care of plantings and lawns, etc.

Section 8.
Window or wall mounted air conditioners shall not be allowed. Only central air conditioning systems shall be permitted.
ARTICLE VIII
COMMON (PARTY) WALLS AND FENCES

Section 1.
General Responsibilities. All common walls or fences occurring on a common property line and shared jointly by adjacent Owners within the First Circle shall be maintained equally by each Owner. In the event that the need for maintenance or repair is caused through the willful or negligent act of one Owner, his family or guests, the cost of such maintenance or repair is the responsibility of the negligent party. Should a dispute arise between Owners regarding responsibility for damages, the dispute shall be submitted to the Association Board of Directors for binding arbitration with a simple majority vote determining responsibility. All arbitration decisions shall be forwarded in writing to the concerned parties. Responsibilities described under this Article shall be appurtenant to the land and pass to such Owners' successors in title.

IN WITNESS WHEREOF, the undersigned, being the Declarant herein, has hereunto set its hand and seal this 1st day of January, 1982.

[Signatures]

HABITAT, INC.
Declant

By:

[Signatures]

President

Secretary/Treasurer

My appointment expires:

April 11, 1982
Appendix C

POTAWATOMIE COUNTY MASTER PLAN REPORT AND FIGURES
Figure 3
Generalized Soils Map

Legend:
1. Kipson-Martin-Sogn
2. Wymore-Pawnee-Martin
3. Eudora-Reading
4. Holts-Morill-Ortello

Source: Preliminary Study, Soil Conservation Service

Pottawatomie County Southwest Area

Physical Character - Page 6A
April 23, 1977
Pottawatomie County
Southwest Area

Figure 14-A
Current Land Use,
(Generalized)

Legend:
- Agriculture
- Parks and/or Open Space
- Residential
- Single Family Subdivisions
- Mobile Home Parks
- Commercial
- Existing Incorporated Cities

Cemeteries locations and miscellaneous
land uses are located by notes.

Land Use-Page 1D
May 28, 1977
Pottawatomie County Highway 24 Corridor Map 1: Manhattan Area

Figure 14-B
Current Land Use, Generalized.

Legend:
- Agriculture
- Open Space & Recreation; includes cemeteries
- Single Family Residential
- General Residential
- Mobile Home Park or Development
- Isolated Commercial
- Commercial Area
- Industrial

Land Use - Page 1E
May 28, 1977
Pottawatomie County
Southwest Area

Figure 17
Land Use Plan

General Land Use Guidelines:

1. Development should focus on growth centers.
   - Wasego
   - St. George
   - Manhattan
   - Unincorporated community development areas noted on the map.

2. Wasego residential growth should occur to the north and to the west. Industrial growth should be encouraged to the east.

3. Linear development along roads should be discouraged. Subdivision and planned unit development should be encouraged.

4. Future development south of the Union Pacific Railroad tracks should be discouraged for reasons of safety.
Figure 9
Linear Projections for Selected Areas in Southwest Pottawatomie County: 1977 - 1993
Figure 10
Linear Projections of the Total Population in Pottawatomie County, Southwes Area: 1977 - 1994

Population - Page 5A
April 15, 1977
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*Remainder of the total amount of land in roads, Kansas River, railroad easement and utility easement.
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<tr>
<td>Recreation</td>
<td>240</td>
<td>70</td>
</tr>
<tr>
<td>Extraction</td>
<td>1,100</td>
<td>800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,960</strong></td>
<td><strong>4,230</strong></td>
</tr>
</tbody>
</table>

A Estimates calculated using present density patterns of 1 acre or greater.
(2) An additional agricultural zone, A-2, has been provided to allow highly conflicting development and agricultural uses to coexist within the same districts. Its use is for districts already in existence and not for future planning purposes. In some cases it will be used for extraction and mining.

(3) The R residential districts have been developed on the proposed land use map (Figure 16) as a guide to future residential development. Specific and general sites have been selected to coincide with the best possible development locations. The Planned Unit Development (PUD) districts are for residential purposes, with some commercial possible, and have been used when conditions are severe for normal housing subdivisions or the area is particularly sensitive.

(4) The areas indicated as Commercial (c) and Manufacturing (M) are concentrated near to developed areas on marginal lands, usually near the floodplain perimeter.

**Future Land Policy**

Since 1972 the Pottawatomie County Planning Commission has developed a number of general policies and goals concerning the future use of the land. These policies and goals are continually being refined in respect to the changing land use situation. Following are the general policies toward land use developed by Pottawatomie County.
(1) **Agricultural Policy**

The prime objective of the Planning Commission is the protection of the prime and good agricultural lands within the county. To this end the zoning and subdivision regulations of the county, and the overall development policy as seen through zoning changes, are designed to discourage and disallow community development on land that is capable of sustained farming management. Under this assumption, the Planning Commission recommends that an agricultural enterprise on prime land be defined as a "unit of land, ten acres or more, each acre adjoining so as to form a continuous whole, which has been or is currently used for the production of food and/or fiber products, animal husbandry for food, management, sale or breeding purposes". This definition is directed at the management and productivity of the soil and deliberately excludes other practices which are common on farms or in agricultural/rural settings such as the raising or keeping of bees, horses, fur bearing animals, or agriculturally related services such as veterinary clinics, food processing, fertilizer production and storage. Such activities which should rightfully take place in rural lands and farms, should be confined to the ranges, pasture, marginal agricultural land and, in general, land that is not prime, or marginally prime for food and fiber production.
The Planning Commission realizes that a conflict between community development and agricultural practices is inherent. Both activities seek the same of land in many cases. The Planning Commission also realizes that the rights of development are as strong as the rights of farming. Nevertheless, after making a comprehensive and systematic investigation of the planning area, the intended development policy is to restrict housing and other types of development from prime agricultural land unless such development can conform to the following standards:

1) The development does not promote scattering and is therefore classed as Planned Unit Development.

2) The development promotes high density and open space practices. Such densities shall be greater than 3 dwelling units per acre.

3) The development is rationally located so as to be accessible to transportation without actually promoting "strip" development.

4) The development incorporates internal water and sanitary facilities on a group basis rather than individual lots.

5) The development promotes efficiency in land use as determined by sound planning and engineering practices. Such development should be considered on a case by case basis and if approval is given, after showing that alternative sites are less efficient, the land should be moved to a lower class of agricultural use and not to a strictly residential zone.
(2) **Subdivision in Agriculture Lands**

Agricultural retention on non-prime lands should be fostered through the use of subdivision regulations rather than the zoning power. Spotted and scattered developments through the planning are a result of prior subdivision practices. Land sold at auctions and farms being converted are the main offenders. No land, other than one free sell-off at less than 20 acres should be allowed. The interest should not be placed primarily on what the developer intends to do internally, although this is of great importance, but rather on what the person originally selling the land intends to do with land remaining in the area.

(3) **Special Permits in Agriculture Lands**

Marginal, good and prime agriculture lands are not uniform in character. Each farm contains some land, no matter how small the portion, that is not suited for farming practices. By retracting these lands on an individual case by case basis through the use of a special permit or conditional use permit a higher and more efficient use can be made of the land.

(4) **Industrial Lands**

Two distinction should be made; the first is a class of general industry and the second is industry, including processing and storage, which serves the agricultural base. The classification
should be broad enough to include services rendered primarily to agricultural residents. The first classification should be excluded from agriculture lands in general unless such land lies contiguous to an incorporated city. Agricultural lands at the fringe of the city could be taken out of production to accommodate industry. Agriculturally related industries can and should be sited throughout the rural area and still promote efficient land use practices. There is absolutely no need for general types of industry to exploit productive land and they should be carefully placed on sub-marginal land.

(5) Commercial Lands

The present commercial pattern is mainly strip development along Highway 24 centered around East Manhattan and Wamego. Because of the heavy volume of traffic on Highway 24, and the basic design of this highway, it is not feasible to plan future commercial sites in the area between Wamego and Manhattan. Several "service type" uses could be accommodated at the intersections of township roads and Highway 24. These uses should either be provided with a "frontage road" for the main access should be from a township road and not from Highway 24.

As a matter of policy, the Planning Commission intends to direct commercial growth to the Manhattan and Wamego areas contiguous with present sites. Although there is presently some housing and manufacturing mixed with commercial uses, the overall plan will be
to eventually shift to commercial and light manufacturing along Highway 24 at the areas mentioned above.

(6) **Industrial Sites**

Presently, very little land is zoned or sited to accommodate general or heavy industry. Because of the present scattered pattern of land use in East Manhattan and Wamego, it will be difficult to plan industrial sites without real conflict.

In general, the policy of the Planning Commission and the County Commissioners is to encourage industrial land users to locate in Manhattan Industrial Park. This facility is located inside the City of Manhattan but within Pottawatomie County. The site is serviced with all facilities and no such site is contemplated in any other portion of the County.

Scattered sites are available in the eastern portion of the county to the south of Highway 24 along the Union Pacific lines. If these sites are developed the County will have to improve the road system and further discourage the development of single family homes.

Wamego has several sites suitable for industry purposes. The area that was originally selected for the Oscar Meyer processing plant (packaging) is a logical and well located area east of the city and south of Highway 24. Several areas within the present limits of Wamego are also possible sites for future industrial activity. All of these are located south of Highway 24 and to the East of the City near present manufacturing concerns.

Land Use - page 8
May 28, 1977
(7) **Overall Housing Activities**

Housing development is the greatest activity in the County and has caused the most urgent problems. Most housing in this area of the County is scattered, ill planned and located with no overall scheme other than individual preferences. Developments, mobile homes and conventional single family units are located without respect to floodplains, transportation facilities, internal improvements and County services. A large minority of the units are of substandard construction and the majority of the subdivisions are substandard in respect to a minimum standard of internal development. Many of the developments, especially in St. George Township, have so hampered an overall scheme for orderly development that policy planning and development regulations will have little if any, effect for decades to come. Although somewhat harsh, it would be realistic to close off some areas in St. George Township and plan around them rather than within them. These closed off areas would then be given the widest possible latitude to develop in the future as they have in the past.

It is the policy of the Planning Commission to further housing and tenure goals to the fullest possible extent. However, this policy continues to conflict with the physical condition and agricultural activity within the County. As was discussed earlier in this section, many if not most parts of the planning area are incapable of supporting on-site liquid waste systems over long periods of time. To aid in alleviating this condition, it is the present
policy of the Planning Commission to require single lot development on a minimum of one acre or more and to implement sewer retention lagoons in organized subdivisions.

In line with the problem of agricultural conflict, also mentioned before in this section, it is the policy of the Planning Commission to disapprove non-agricultural activities on prime agricultural lands except on a special permit basis. Such permits would be conditioned upon the willingness of the developer to provide Planned Unit Development type of high density-open space subdivisions. Further, it is the express policy of the Planning Commission to discourage development on the good and marginal agricultural and timber lands and to direct development to the higher elevations and to the fringes of the incorporated cities.

(8) City Planning

The City of Wamego should be allowed to control their own fringe development and expand outward into surrounding lands on a contiguous basis. The city should be encouraged to develop a set of joint controls and review procedures with the County in order to control the proliferating developments within 3 miles of the current boundaries. Wamego should annex the housing developments to the north of the city and west of Highway 99.
Although some of these in developments in this area are poorly
planned and located, it would be wiser to impose a "hold harmless"
condition on present development than to allow further citing.
Wamego, naturally enough, would be somewhat reluctant to take over
this large land area, complete with service requirements, and
to help in overcoming this reluctance the County should recognize
its responsibility and cost share for streets, water and sewer
facilities.

In the future, all development decisions that occur within
5-6 miles of Wamego should be taken jointly with the Wamego City
Planning Commission and City Council.

(9) Other City Planning

Louisville, other than its continuing floodplain condition, offers very little problems in the near future. The City has very
large boundaries for its present size and can easily accommodate the expected small amount of future development.

The area fringes of the City of St. George, has been and continues to be one of the problem areas in the County. The County should continue to assume full authority for development throughout this Township and fully recognize the extent of poor development.

East Manhattan is in a changing land use pattern. In the past the area was generally populated by residential development interspaced with some commercial and agricultural activity.
Much of this housing is in a highly undesirable location due to drainage, floodplains and a major highway. In the past 5-6 years the area in and around East Manhattan has changed to a commercial-industrial pattern. In the long range view this change is highly desirable. The area is adequately serviced by transportation and is generally favorable for heavy land use activity. Residential use should be discouraged in the future and the County should begin enforcing the floodplain provisions applicable to this portion of southwest Pottawatomie.
AN ANALYSIS OF THE PLANNING AND DESIGN PROCESS
OF A SMALL COMMUNITY NEIGHBORHOOD:
TIMBER CREEK I, POTAWATOMIE COUNTY, KANSAS

by

Barbara Rose Bonanni

B.S., Cook College, Rutgers University, 1982

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the
requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Regional and Community Planning

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1984
ABSTRACT

Residential environments are an important part in people's lives, and therefore, town planners and designers need to know about people's attitudes, perceptions, and preferences of their community. The intent of this report is to analyze the planning and design process that went into the creation of the residential neighborhood community of Timber Creek I in Pottawatomie County, Kansas for the purpose of evaluating the design intentions of the professional in comparison to resident perceptions of their neighborhood. Interviews, a questionnaire, observations, and actual and theoretical research are the tools used for this analysis and to come to the end product of a list of design criteria based on the prototype.

The environmental value categories used by Donald Appleyard (1973) will be integrated into the evaluation of Timber Creek I under the design aspects of economics, planning policy, physical and social considerations. These values are:

1. Values related to survival, e.g. safety, security, health.

2. Values related comfort (or lack of stress), e.g. spaciousness, quietness, light, cleanliness, ease of movement.
3. Values related to efficiency, e.g. accessibility, convenience, orientation, information.

4. Values related to personal development, e.g. privacy, identity, territorial control, personal expression, environmental mastery.

5. Values related to social development, e.g. social interaction, equity, cultural expression.

6. Values related to environmental administration, e.g. management efficiency, economy, adaptability.

These generalized values and subsequent behavioral influence of one's environment can be linked to the physical design of communities and the sense of community and satisfaction with one's environment that might result.