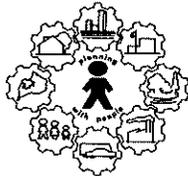


# **AFTER APRIL 3, 1974...**

## **A Post-Tornado Planning Report**



**louisville and jefferson county planning commission**

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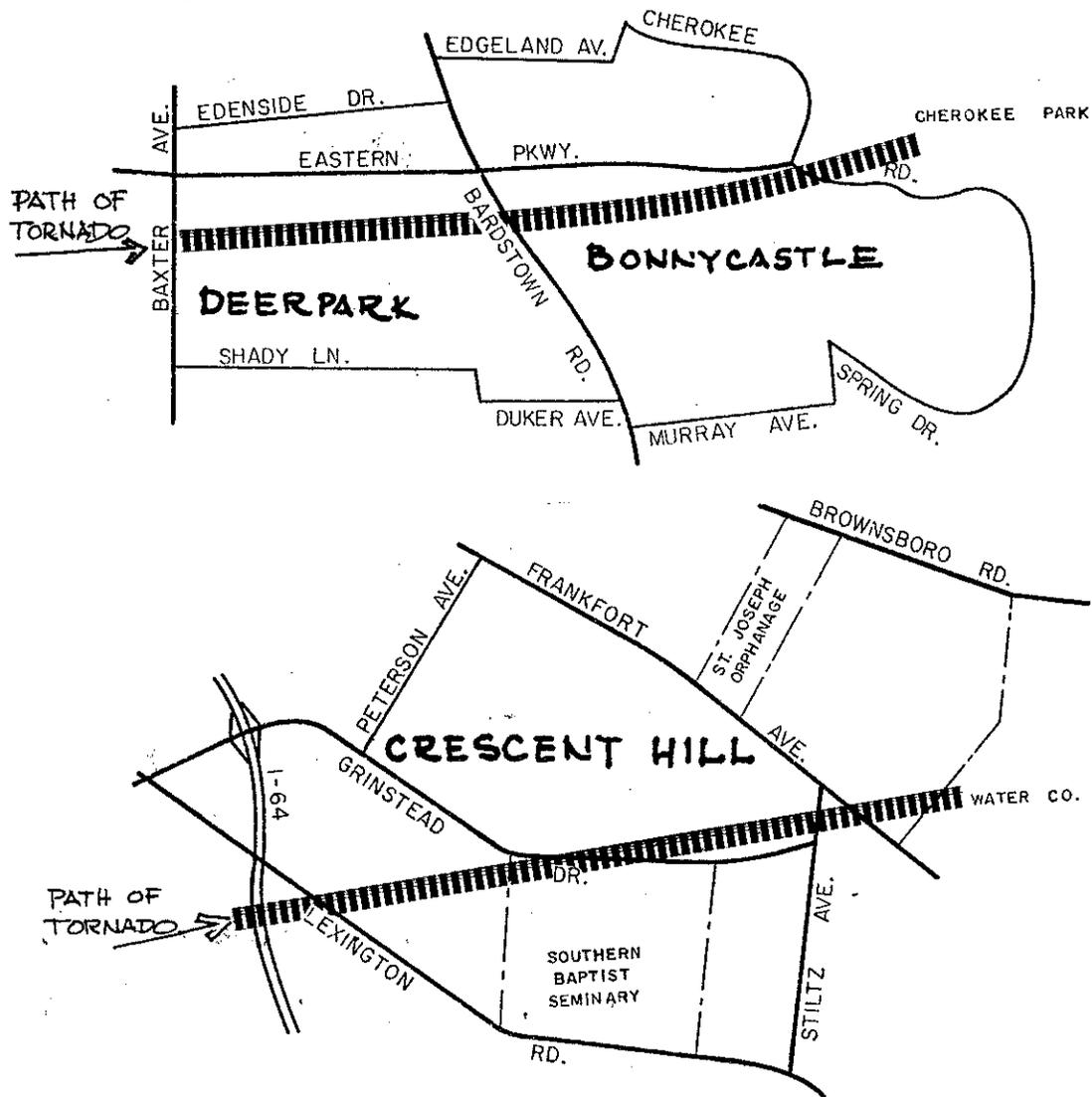
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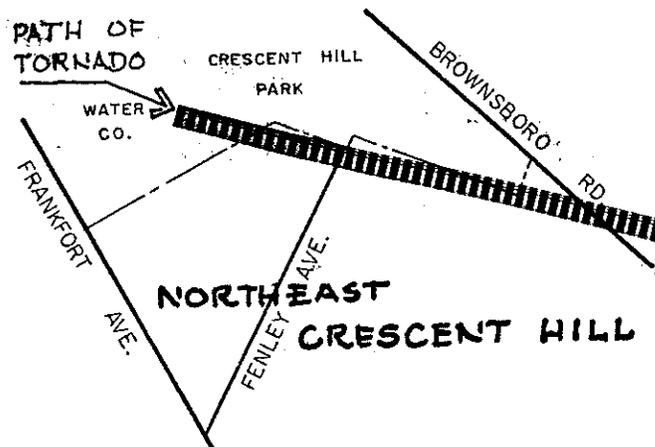
## INTRODUCTION

On April 3, 1974 a tornado ripped through portions of Louisville and on into adjoining communities and portions of the unincorporated county. In the aftermath of the storm extensive public and private activities have been initiated to rebuild the damaged and demolished areas.

Mayor Harvey Sloane asked the Planning Commission to prepare a planning study for the damaged parts of the city on April 17, 1974. That request, concurred with by the Board of Aldermen, has resulted in this report and the accompanying maps.

For the purpose of this study the area of interest has been limited to the three areas shown on the following maps, which include the areas of substantial damage.





The three study areas are each part of existing neighborhoods: Deer Park, Bonnycastle-Homestead and Crescent Hill. In discussing problems and recommendations, Deer Park refers to part of the larger Deer Park neighborhood, Bonnycastle refers to the northern part of the Bonnycastle-Homestead neighborhood and the southern part of the Cherokee Triangle, Crescent Hill refers to that portion of the neighborhood centered along the Grinstead Drive-Stiltz Avenue-Pennsylvania Avenue corridor and the Northeast Crescent Hill refers to that area east of the Water Company property and north of Frankfort Avenue.

The purpose of this study has been to identify both those problems which were a direct consequence of the tornado as well as those which pre-dated it. Due to severe time constraints, the geographic focus of the study was limited to only those areas stricken by the tornado. However, it was felt that our recommendation for reconstruction should be closely tied to the neighborhood's overall objectives. A premise followed in the development of the recommendations was that while the tornado obviously caused numerous problems, it was also possible that it may have created opportunities to solve non-tornado related problems, thus maximizing the community's gains from an otherwise adverse circumstance.

## SUMMARY OF PROBLEMS AND RECOMMENDATIONS

### A. Major Problems

#### 1. Recreation

During the course of this study, inadequate recreation facilities were found to be a problem in several areas. Following is a list of additional recreation space needed in the study area:

##### a. Deer Park - Bonnycastle

1. a small park with recreation facilities is needed to serve the area bounded by Eastern Parkway, Cherokee Road, Murray Avenue and Bardstown Road.

##### b. Crescent Hill

1. the area between Frankfort Avenue and Brownsboro Road centered on Hillcrest Avenue would be better served by the addition of more facilities to Crescent Hill Park and by improved access to the park;
2. the area bounded by Frankfort, Stiltz, Grinstead and Birchwood Avenues requires an additional acre of recreation space;
3. the area bounded by Frankfort, Birchwood, Peterson and Grinstead needs an additional acre of recreation space;
4. Cochrane Hill requires an additional acre of recreation space;
5. the area bounded by Grinstead Drive, the Baptist Seminary, Lexington Road and Stiltz Avenue requires an additional acre of recreation space

##### c. Tornado Damage

Structural damage was sustained by approximately 465 principal structures in Deer Park - Bonnycastle, 430 residential and commercial structures in Crescent Hill, and 50 structures in the Northeast Crescent Hill area. Damage was severest in Crescent Hill and consisted mainly of roof and wall damage with a few structures totally demolished.

Damage to trees and sidewalks occurred in the same approximate area that sustained damage to structures.

It appears that the great majority of damaged structures will be repaired, based on the location of building permits that have been issued to replace damaged structures and on repair and reconstruction work observed in the field.

### 3. Circulation

The greatest circulation problem in the study area is pavement width -- many streets are simply too narrow to allow safe and easy access for residents, on street parking, and, perhaps most importantly, maneuvering room for emergency equipment. Three streets have inadequate pavement width in the Deer Park - Bonnycastle area --- Fernwood, Stevens and Sherwood. In the Crescent Hill area, Crescent Court, Kennedy Court and the southern end of Birchwood have unsatisfactorily narrow pavement. Most of the streets in the Northeast Crescent Hill area north of Frankfort Avenue have inadequate pavement width with the exception of the first block of Blackburn Avenue.

### 4. Zoning

Existing zoning patterns in the three neighborhood study areas reflects the predominant use of the land. However, the residential districts generally permit a much higher density than now exists with the exception of Deer Park.

In Deer Park west of Bardstown Road most of the land is classified as R-5 which permits a maximum density of 7.2 single family dwelling units per acre on land already subdivided. Existing densities in this area exceed the permitted maximum in over half the blocks in Deer Park. This can be explained by the fact that Deer Park was developed before the Zoning District Regulations were adopted.

The reverse situation is found on the east side of Bardstown Road where zoning districts permit a much greater density than currently exists. Although block density equals that of Deer Park in some areas, it is still considerably less than the maximum allowed under the R-7 (34 dwelling units per acre) and R-8 (58 dwelling units per acre) districts found in this area.

The zoning pattern of Crescent Hill is similar to that of Bonnycastle. In this case the existing zoning includes a large R-6 Apartment District, which allows up to 17.4 dwelling units per acre, with current densities of 5 to 8 dwelling units per acre.

The Cochrane Hill area is developed at a lower density than is permitted under the existing R-5 zoning.

There is a vacant R-7 Apartment District along the northern edge of the Northeast area.

## B. Major Recommendations

### 1. Comprehensive Plan

It is suggested that the Comprehensive Plan in the affected parts of Deer Park, Bonnycastle and Crescent Hill not be amended at this time. At a later date when a more comprehensive planning program can be carried out amendments to the Plan should be considered.

### 2. Zoning District Changes

It is suggested that zoning districts be adjusted to more accurately reflect the predominant type and density of dwelling units. Accordingly a new zoning district R-5A is proposed, a district that better meets the needs of an urban, predominantly "single family detached house" neighborhood. The proposed district would permit redevelopment within a density range that could be accommodated by the existing public facilities.

### 3. Circulation and Parking Improvements

It is suggested that numerous public improvements be made in widening, straightening and building for the first time streets, intersections and alleys. Also cited is the opportunity to explore a joint city-citizen program to improve alleys and develop off street parking spaces to ease the parking problem.

### 4. Recreation

It is suggested that several properties be investigated for their potential use as neighborhood parks. The most important suggestion is the use of public land across the street from the Crescent Hill swimming pool. Sketch plans exploring the potential usability of the neighborhood parks are included.

### 5. Street Tree Planting

It is suggested that destroyed trees be replaced in a replanting program. Areas that were previously void of street trees and yet have room to accommodate them should also be considered in the planting program.

### 6. Private Rebuilding Efforts

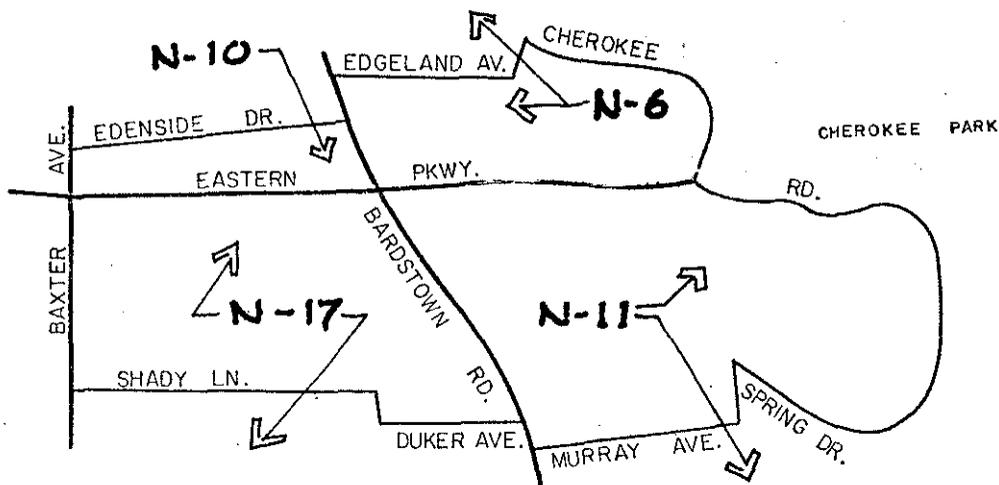
It is suggested that the Planning Commission attempt to bring together individual property owners that face the replacement of their demolished homes and the professional advisors that can outline ways that the owners may be able to benefit through joint action.

## INVENTORY

### A. Population

#### 1. Deer Park - Bonnycastle

The Bonnycastle - Deer Park area that was damaged in the tornado is made up of portions of planning units N-6, N-10, N-11 and N-17. These are older, established sections of Louisville. According to the Population Report for Louisville and Jefferson County prepared by the Planning Commission, only planning unit N-6 gained population between 1960 and 1970. The decade between 1970 and 1980 is projected to show further loss of population in all of the planning units. Planning unit N-10 should stabilize (lose no more than 100 persons) during this period, while the other planning units may show a moderate to major decline in population. Such a decline is the continuation of a trend being experienced nationwide by built-up older urban neighborhoods. Generally, as household population ages, it tends to decline in quantity as children mature and leave home. The recycling of homes, that is the occupancy by young families, will off-set but not reverse the decline. The decline may be further lessened if the neighborhood experiences a redevelopment cycle with the building of more dwelling units at a higher density.

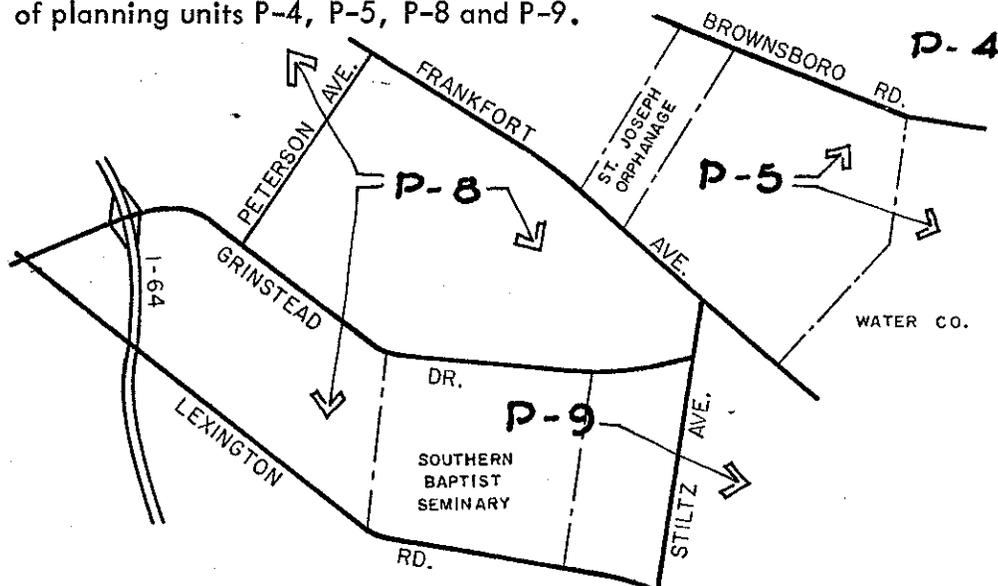


The population of the area affected by the tornado was approximately 4,270 persons in 1970.\* The total population of the four planning units in 1970 was 21,314 thus the affected area accounts for approximately 20%\* of the population.

\* This figure does not include block statistics for Planning Unit N-10, which are not available.

## 2. Crescent Hill

The Crescent Hill and Northeast Crescent Hill areas are made up of portions of planning units P-4, P-5, P-8 and P-9.



Planning Unit P-4 (north of Brownsboro Road) was the only area to gain population between 1960 and 1970, while unit P-5 lost only eight persons. P-8 and P-9 both declined in population in excess of 200 persons in each area, or approximately 5% and 8% respectively, of the 1960 total population.

Projections for the decade between 1970 and 1980 predict a continued moderate decline in planning units P-5, P-8 and P-9. P-4 is expected to continue growing at a moderate rate due to the continuing development of vacant land.

The area struck by the tornado in Crescent Hill contained approximately 6,584 persons in 1970 while the total population of the four planning units was 15,946. Approximately 41% of the population of the area was affected.

## B. Land Use

### 1. Type of Uses

- a. Deer Park - Bonnycastle, refer to Land Use Map 1 and Recreation Analysis Map 2.

The Deer Park - Bonnycastle neighborhood is completely developed with a mixture of housing types, commercial property along Bardstown Road and a variety of institutional and community facility uses. The northeastern edge of the neighborhood is bounded by Cherokee Park.

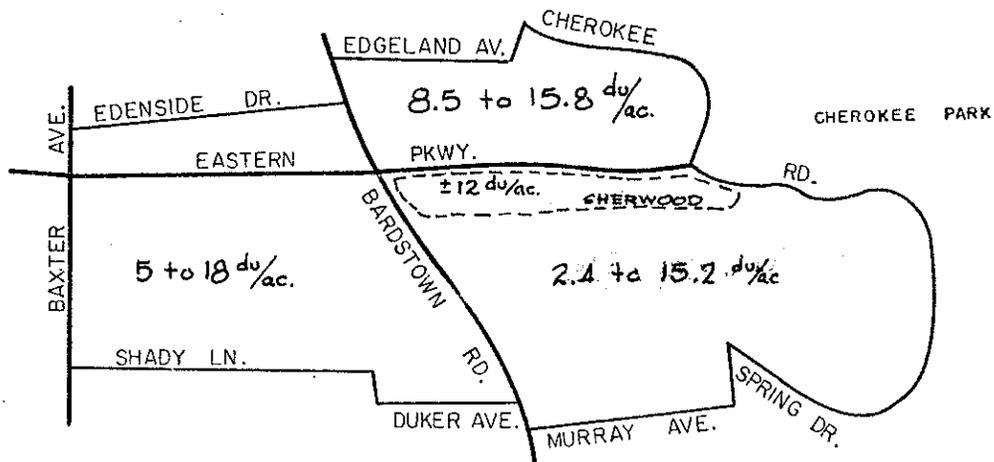
The housing types in the area bounded by Eastern Parkway, Bardstown Road, Edgeland Avenue and Cherokee Road range from single family houses, duplexes, and two-story apartment buildings to a 14-story apartment building. The block density in this section ranges from 8.5 to 15.8 dwelling units per acre. The Edenside Christian Church is located in this section.

The area bounded by Eastern Parkway, Cherokee Road, Bardstown Road and Murray Avenue has a similar variety of housing types like the previously discussed block - single family, duplexes, low-rise and high-rise apartments. The block densities range from 2.4 dwelling units per acre along Cherokee Road facing Cherokee Park to 15.2 dwelling units per acre along the south side of Bonnycastle. Some of the multi-family structures have been built on redeveloped property in recent years.

The area between Edenside Drive, Bardstown Road, Shady Lane and Baxter Avenue is predominantly developed with single family residential dwellings. Multiple family dwellings are limited to several four-plexes throughout the area, a 22-unit complex on the corner of Norris Place and Shady Lane, and two apartments, one containing 18 units, the other 8, on Eastern Parkway. The predominant single family development within this area has been built at a relatively high density for single family structures.

Longfellow Elementary School is located in this area on Duker Avenue and St. James School on Edenside Drive. St. James Church is also at this location. Other institutional uses include the Home for the Incurables on Stevens Avenue.

There is a variety of neighborhood and general commercial uses along Bardstown Road with two principal clusters of neighborhood uses located south of the intersection of Eastern Parkway and Bardstown Road and at the intersection of Bonnycastle and Bardstown Roads.



The Neighborhood Analysis studies carried out by the Planning Commission indicate the majority of structures in Deer Park-Bonnycastle area to be in a relatively sound condition when compared with the variety of housing conditions found throughout the city and county. The pressures for redevelopment in the neighborhood to higher density apartments results more from the reaction of private enterprise to a favorable economic situation than from the need to rebuild deteriorated structures.

For neighborhood level recreational purposes, the approximately 700 persons in the area bounded by Bardstown Road, Eastern Parkway, Edgeland Avenue and Cherokee Road are served by Cherokee Park and a .7 acre childplay park at Willow Avenue and Cherokee Road. (It is assumed that the demand of 1.6 acres for the population based on recreation standards is met and no additional park land is needed for this area.\*)

There are 1,866 people in the area bounded by Eastern Parkway, Cherokee Road, Murray Avenue and Bardstown Road. The demand generated for this area is 4.6 total acres of recreation land. Cherokee Park adjoins this section and supplies the land required for passive recreation; however, all the active recreation facilities in Cherokee Park are located too far from this area to serve it. A small, active recreation park might be considered in the immediate vicinity of this area. Access to Cherokee Park is across a collector road which could act as a barrier.

The area north of Eastern Parkway and west of Bardstown Road is served by Tyler Park. The demand for the entire planning unit is 12.8 acres. Tyler Park supplies 12.6 acres. It is assumed that no additional park area is needed at this time.

The area bounded by Eastern Parkway, Baxter Avenue, Shady Lane and Bardstown Road is served by Longfellow School and Highland Junior High School. The approximately 1,612 people create a demand for four total acres of recreation land (two acres active, two acres passive). The total supplied is 4.6 acres or .6 acre greater than the demand.

- b. Crescent Hill, refer to Land Use Map 3 and Recreation Analysis Map 4.

Crescent Hill is a predominantly residential neighborhood with a variety of housing types. The area is bordered by the Louisville Water Company on the east side and Cherokee Park on the southwest side. The area north of Grinstead Drive including the area northeast of Frankfort Avenue is composed of predominantly single family structures. Numerous large frame single family structures have been divided into duplexes and apartments. There are several four-plex structures throughout the area, a 36-unit new apartment building on Frankfort near Bayly Avenue and a 22-unit apartment complex on Crescent and Frankfort Avenues.

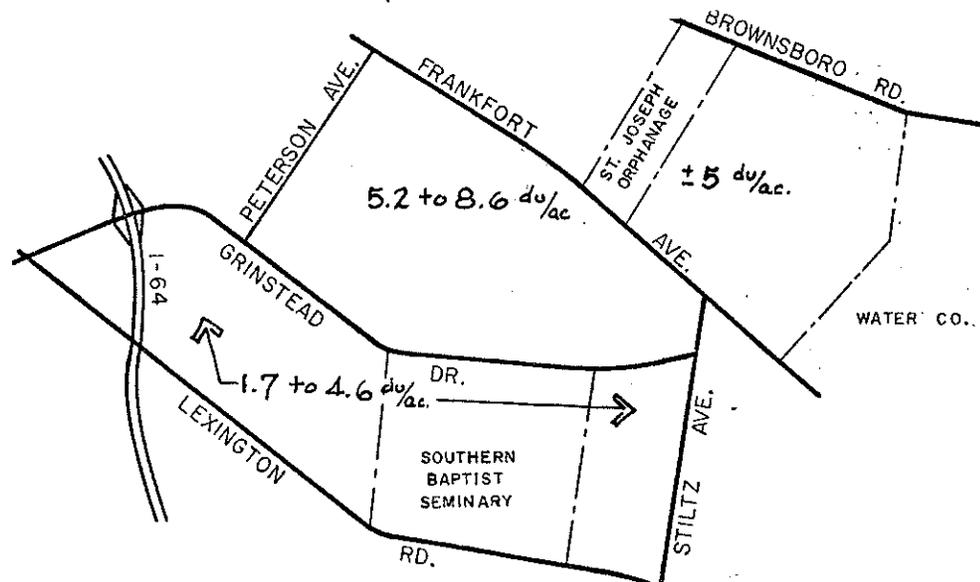
\* Recreation standards are contained in the report Outdoor Recreation Plan prepared by the Planning Commission in 1973.

The density in the area north of Frankfort Avenue is approximately five units per acre. The block density in the area between Frankfort Avenue and Grinstead Avenue ranges from 5.2 to 8.6 dwelling units per acre.

The area south of Grinstead Drive is developed with single family residences with the exception of two duplexes. The density in the blocks between Grinstead and Lexington range from 1.7 to 4.6 dwelling units per acre.

The only commercial facilities are along Frankfort Avenue. They consist of a grocery store, drug store, movie theater and bar.

Barrett Junior High School is located within the tornado study area on Grinstead Drive between Peterson and Galt Avenues. There is also the Southern Baptist Theological Seminary, an orphanage, a women's club and three churches in the study area. A public library located on the corner of Birchwood and Frankfort Avenues serves the Crescent Hill area.



Neighborhood Analysis studies indicate that the condition of residential structures in Crescent Hill is relatively sound, similar to those in Deer Park - Bonnycastle.

Neighborhood recreation needs for the approximately 1,187 people in the area between Frankfort Avenue and Brownsboro Road are served by Crescent Hill Park. The park is located north of the Water Company and east of the residences on Pennsylvania Avenue. The demand generated by the population is for three acres, 1.5 acres developed in active recreation and 1.5 acres passive recreation. Crescent Hill Park provides .8 acre of court sports, a swimming pool and has a total of 77 acres. The great majority of the park land is used for the nine hole golf course. This park could better serve the section of Crescent Hill north of Frankfort Avenue if it were developed with the additional recreational facilities and if better access were provided.

The population in the area bounded by Frankfort, Stiltz, Grinstead and Birchwood Avenues is outside all the present service boundaries of existing recreation facilities and, therefore, not served. The approximately 390 people in this area create a demand for one acre of parkland; .5 acre developed with active recreation and .5 acre with passive recreation.

Barrett Junior High School and Clark Elementary School serve as recreational facilities for the area bounded by Frankfort, Birchwood, Peterson Avenues and Grinstead Drive. There are approximately 2,130 people served by this park which creates a demand for 5.6 acres; 2.8 acres of active development and 2.8 acres of passive development. Clark Elementary School supplies .6 acre (.4 acre of which is developed) and Barrett Junior High School 4 acres (.8 acre of which is developed). There is a deficit of one acre even if the entire Barrett Junior High School property is fully developed.

The Cochrane Hill area is in the service radius of Barrett Junior High School and Cherokee Park; however, access to either of these facilities is across a major road which acts as a barrier. There are approximately 420 people in this area which creates a demand for one acre (.5 acre active, .5 acre passive) of neighborhood parkland.

There are 350 people in the area bounded by Grinstead Drive, the Baptist Seminary, Lexington Road and Stiltz Avenue which produces a demand for one acre (.5 acre active; .5 acre passive) of parkland. Even though this acre lies within the service radius of Field Elementary School it cannot be considered served regardless of its proximity because the elementary school cannot meet all of the demand generated by the other adjacent areas it serves.

- c. Northeast Crescent Hill, refer to Land Use Map 5 and Recreation Analysis Map 6.

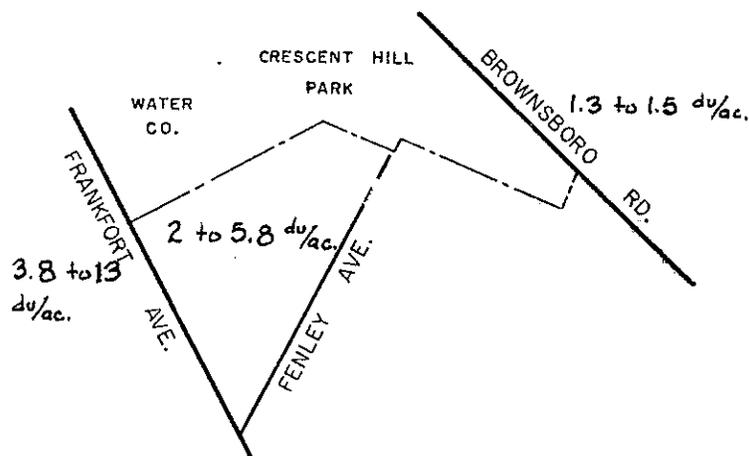
The area north of Frankfort Avenue is developed residentially. There is a predominance of single family residences; however, there are some dwellings which have been converted into duplexes and apartments. A twenty-five unit apartment complex is located on Arterburn Avenue between Crestmoor and Fenley Avenues. The block density in this area ranges from approximately 2.0 to 5.8. The area south of Frankfort Avenue is developed with single family dwellings with the exception of three four-plexes and several commercial establishments along Frankfort Avenue. The block density in this area ranges from 3.8 to 13 dwelling units per acre.

The area north of Brownsboro Road is developed with large lot single family dwellings. The density ranges from 1.3 to 1.56 dwelling units per acre.

Institutional and recreational facilities in the area include the Seminary Village and Masonic Widows and Orphans Home located east of Fenley Avenue and north of Frankfort Avenue, the Chenoweth Elementary School located

south of Brownsboro Road and the Crescent Hill Golf Course also located south of Brownsboro Road.

The commercial use located along Frankfort Avenue includes two pubs, a laundromat, a fruit stand and a used clothes store. The commercial area along Brownsboro Road west of Chenoweth Lane is developed as a neighborhood shopping center.



The condition of residential structures in the Northeast Crescent Hill area is relatively sound, as in the Crescent Hill and Deer Park - Bonnycastle areas.

There are approximately 510 people in the area north of Frankfort Avenue between the Louisville Water Company and Fenley Avenue. The demand for neighborhood recreational facilities created by the population is 1.2 acres of parkland. The area is served by Crescent Hill Park and Chenoweth Elementary School and Playground. The supply of recreation in this area is greater than the demand; however, there is apparently no direct access to the two recreational facilities from this area.

## 2. Damage Analysis

A survey of the damage caused by the April 3rd tornado was initially conducted by the Department of Building and Housing Inspection. Follow up examinations have been made by the Planning Commission staff. The surveys conducted thus far have been limited to an examination of the damage as observed from the public right-of-way and are intended to generally show the extent of community-wide damage rather than to necessarily pinpoint the extent of damage for each structure.

a. Structural Damage, refer to Maps of Structural Damage 7, 8 and 9.

Structures in the Deer Park - Bonnycastle area suffered extensively from roof damage due both directly to the wind and to falling trees. The area most extensively damaged was the south side of Stevens between Norris Place and Fernwood and along the north side of Sherwood east of Bardstown Road where more extensive structural damage was concentrated. The survey of the areas shown on the accompanying maps indicate approximately 467 principal structures were damaged, in addition to numerous secondary structures, mostly garages.

In Crescent Hill the degree of destruction increased markedly over Deer Park - Bonnycastle. The most severely damaged area occurred along Grinstead Drive between Hite and Birchwood, the southern half of Kennedy Court, Crescent Court, and along Hillcrest and Pennsylvania north of the railroad. Elsewhere, serious damage occurred sporadically amid widespread roof and wall damage. The survey indicated approximately 430 residential and commercial structures were damaged in the survey area. Additionally, damage occurred at sites that were not surveyed, such as the Southern Baptist Theological Seminary and the Louisville Water Company.

In the Northeast Crescent Hill area, the last area struck in the City of Louisville, approximately 50 structures were damaged including Chenoweth Elementary School. Through the northeast area, the route of the tornado centered primarily on the Water Company, the Crescent Hill Park and Golf Course, and the undeveloped property of the Masonic Widows and Orphans Home. The greatest concentration of damage occurred along the north end of Clarendon Avenue and at the intersection of Lightfoot Road and Brownsboro Road.

b. Street Tree and Sidewalk Damage, refer to Maps 10, 11 and 12.

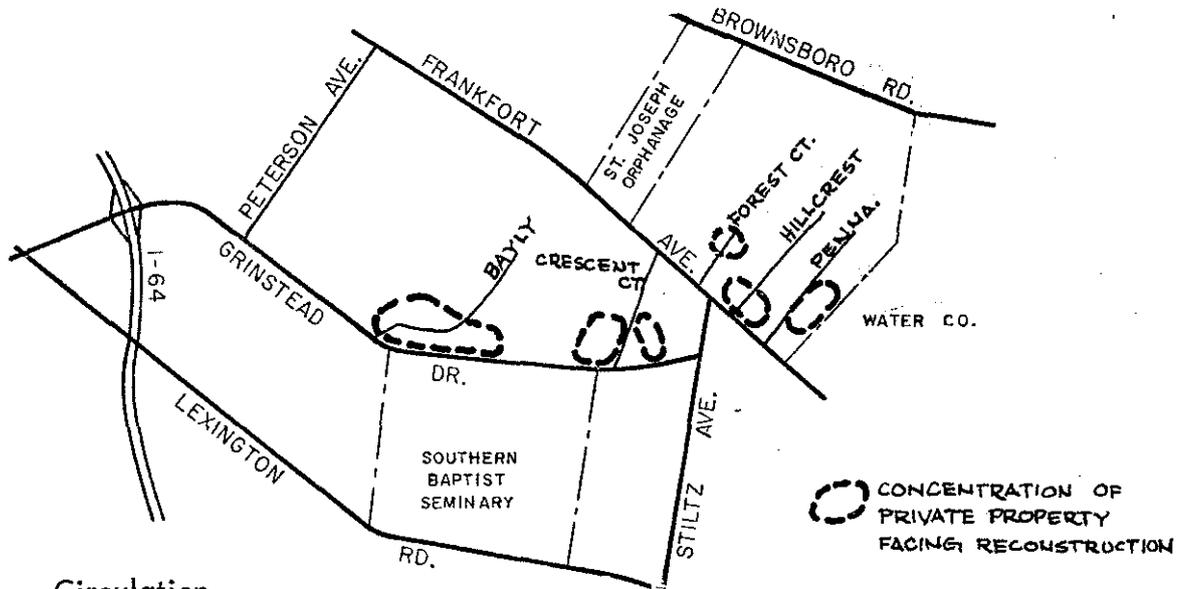
An informal survey of damage to street trees, trees within the public right-of-way and not on private property, and public sidewalks was carried out. The patterns shown on the maps indicate the damage occurred in the same approximate areas that received damage to structures.

c. Rebuilding Efforts

Based on the location of building permits to replace damaged structures and on repair and reconstruction efforts observed in the field, it appears that the great majority of damaged structures will be repaired.

The Department of Building and Housing Inspection prepared a list of structures that had been demolished or were believed to be seriously damaged.

Seven structures were listed in Deer Park - Bonnycastle, 77 in Crescent Hill and three in Northeast Crescent Hill. Under provision of the federal Disaster Relief Act, five owners in Deer Park - Bonnycastle have signed releases to permit the demolition of their property as of May 28, 1974. As of that same date 28 owners in Crescent Hill and three in the Northeast area had signed demolition releases. By far the most serious rebuilding is identified on the map below. Other than the owners who have signed releases for demolition, the exact number of structures to be replaced cannot be determined. Owners who have not signed for demolition may be repairing their structure or deferring a decision in regard to the choice to repair or demolish to a later date. The figures on the accompanying map should be considered an indication of the potential rebuilding demand since decisions made by owners since May 28 could alter the quantity.



## C. Circulation

### 1. Existing Street System

The existing street and highways network functions in a system of traffic carrying routes, some carrying greater volumes of traffic and others carrying only local traffic seeking access to the adjoining property.

In the Deer Park - Bonnycastle area, Bardstown Road, Eastern Parkway - Willow Avenue, and Newburg Road function as the highest order of street. Norris Place and Cherokee Road along the perimeter of Cherokee Park function as collectors. The remainder of the streets function primarily as local streets. Due to the relatively regular gridiron pattern, most streets probably experience some degree of through traffic; however, their primary function appears to be the provision of access to adjoining property.

## 2. General Standards

In order to examine the street system to determine its level of effective service it was necessary to develop standards to measure the existing system. In conjunction with the Department of Traffic Engineering, the following general guidelines were developed:

- Minimum pavement width for a street with two-way traffic and parking on both sides - 36 feet.
- Minimum pavement width for street with two-way traffic and parking on one side - 30 feet.
- Minimum alley width for two-way traffic and ample maneuvering space to enter and exit garages - 20 feet.

## 3. Circulation System Analysis and Problems, refer to Circulation Problem Maps 13, 14 and 15.

### a. Width of Pavement

Three streets stand out as being woefully inadequate in terms of pavement width in Deer Park-Bonnycastle - Fernwood, Stevens and Sherwood. Fortunately, Fernwood functions as a secondary neighborhood route. Few houses face it and it probably serves as an overflow for parking from the intersecting cross streets\*. Sherwood, on the other hand, at 24 feet in width with two-way traffic and parking on both sides, represents a potential hazard. With a length of one-half mile from Bardstown Road to Cherokee Road without an intersecting cross street, traffic travelling the route must dodge between parked cars in order to avoid oncoming vehicles. It also appears that guaranteed speedy access by fire engines along the length of Sherwood could be hampered during an emergency by the narrow pavement width. Other streets and alleys throughout the neighborhood also have an inadequate width as noted on the accompanying map.

In the Crescent Hill area, Crescent Court, Kennedy Court and the southern end of Birchwood stand out as unsatisfactorily narrow pavement. The problem on Kennedy Court and Birchwood is compounded by rough pavement. Pavement in numerous alleys in Crescent Hill either does not exist or has an extremely narrow and rough pavement. The primary area experiencing this problem is bounded by Grinstead Drive, Stiltz and Frankfort Avenues.

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\* Stevens Avenue with a pavement width of 25 feet provides for inadequate movement of two-way traffic due to the presence of parked vehicles on both sides of the street. The degree of problem on Stevens is lessened due to the frequency of cross streets. It is likely that traffic is primarily concerned with access to the adjoining lots.

Most of the streets in the Northeast area north of Frankfort Avenue have inadequate pavement width with the exception of the first block of Blackburn Avenue. The lack of through traffic helps in preventing the problem from becoming more serious.

b. High Accident Locations

In the three tornado study areas, four intersections have had frequent accidents based on a survey of accident reports spanning 1972 to 1974. The entire area within the three study areas was not included in the survey, but for the intersections included, several stand out as problems. In Deer Park-Bonnycastle, the Bardstown Road corridor contained most of the accidents with a relatively higher volume at the intersections with both Sherwood and Bonnycastle. In Crescent Hill the accidents are generally confined to Grinstead Drive and Frankfort Avenue. Along Grinstead the intersections with Peterson and Stiltz have experienced several accidents while accidents have occurred at numerous locations along the part of Frankfort Avenue included in the study.

c. Sight Distance

Inadequate sight distance for motorists attempting to move into an intersection to view oncoming traffic can be a particular hazard. The significant sight distance problems are located in the Crescent Hill study area along Lexington Road at its intersection with Upland, Cochrane and Top Hill Roads and along Grinstead Drive at its intersections with Upland and Hite Avenues.

d. Intersection Design

The most desirable intersection design for urban streets is a four-way or three-way ("T") intersection where the streets intersect at 90 degree angles. Such a relationship provides motorists with the safest intersection design. If the angles of the intersecting streets vary substantially from 90 degrees, turning movements and adequate sight distance may become a serious problem.

A second objective for the design of intersections is the desire to avoid off-set intersections. Intersecting streets should be aligned to continuous pavements to avoid the necessity of jogging down an intervening street while attempting to move through an intersection on the same street. Off-set intersections of side streets with primary streets also cause problems for the primary street by increasing the frequency of intersections and the possibility of slowing traffic due to turning movements.

In the Deer Park-Bonnycastle area the intersection of Sherwood and Cherokee Road appears to present the most problem due to the narrow angle at the intersection. Off-set intersections plague Bardstown Road and Fernwood with by far the most serious implications for Bardstown Road. The incidence of intersections with frequent turning movements and stops has contributed to the accident rate along Bardstown Road.

In Crescent Hill, two intersections present problems from a design point of view, the intersection areas of Grinstead - Hite and Stiltz - Frankfort - Hillcrest. The former intersection presents a problem due to the compounding of the angle of intersection with the curve on Grinstead Drive, and the latter, due to the off-set pavement, presents a problem to the through traffic between Stiltz and Hillcrest.

#### D. Parking

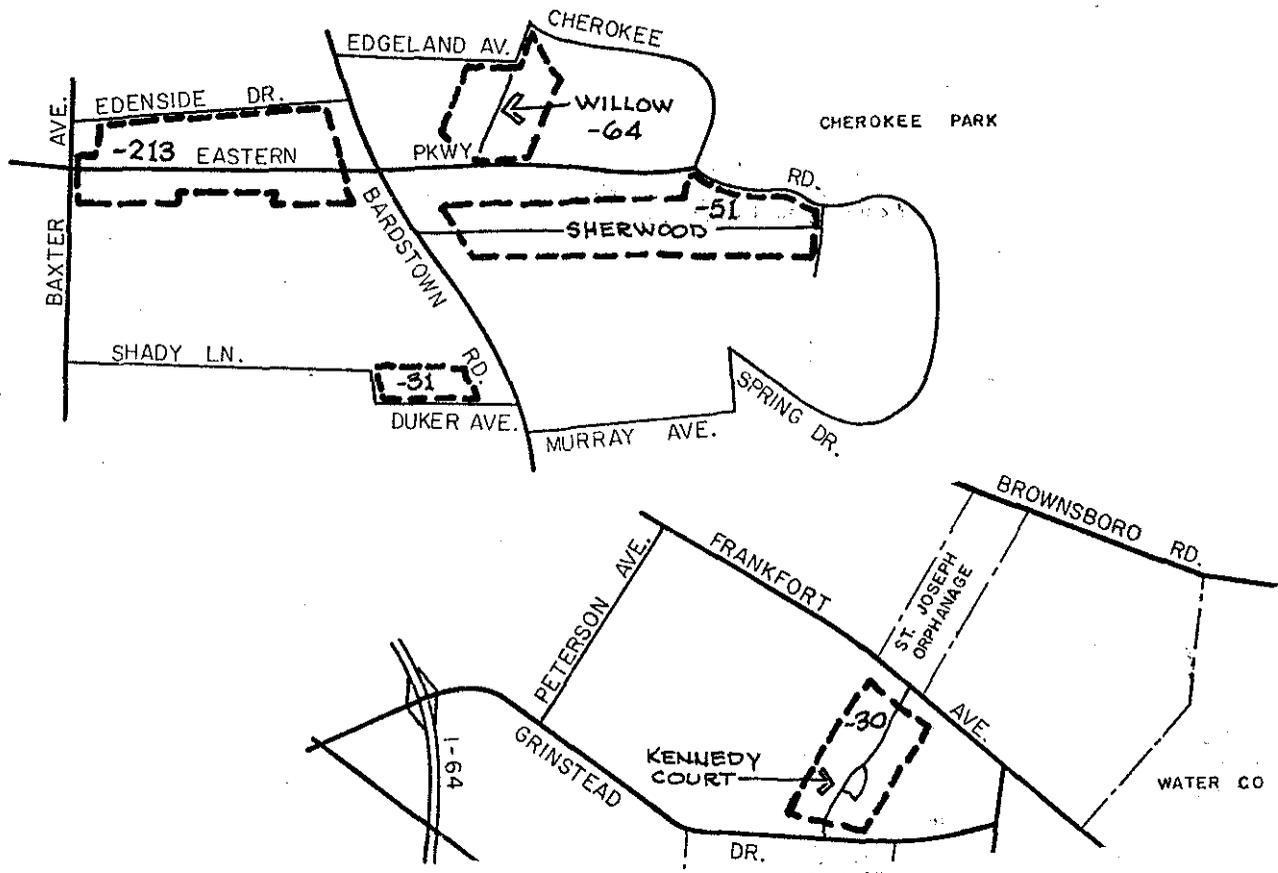
##### 1. Supply and Demand

An analysis of the existing parking supply and demand was made for the three study areas. An effort was made to determine both the capacity of on-street as well as off-street parking areas. The off-street parking supply included a count of free standing garages. The accuracy of the off-street parking capacity of a particular block may be inaccurate if a large number of residents choose not to use their garages for parking due to inadequate access and maneuvering space in the alleys. The off-street parking inventory is also limited in that garages located within single-family residential structures were not counted.

The demand for parking was estimated at a rate of one and one-half vehicles per dwelling unit. The Zoning District Regulations require that only one off-street parking space be provided for each unit; however, the one to one ratio was not believed to be an accurate reflection of the actual frequency of car ownership. The parking requirements required by the zoning regulations for commercial and community facility uses were used as a general reflection of their parking demands.

##### 2. Parking Problems, refer to Maps 16, 17 and 18.

The supply and demand data was calculated for sub-parts of the three study areas as reflected on the Parking Analysis maps. The areas with the greatest deficiencies in parking spaces are summarized below.



## E. Zoning

### 1. Background

Zoning is the regulation by government of the use of land and of the structures on that land so as to protect the public health, safety and general welfare. When zoning was finally accepted as a legal exercise of the police power in the 1920's, the U. S. Department of Commerce prepared the Standard Enabling Acts followed by most states. This document set forth the following purposes for zoning:

1. to lessen congestion in the streets;
2. to secure safety from fire, panic and other dangers;
3. to promote health, morals or general welfare;
4. to provide adequate light and air;

5. to prevent overcrowding of land and buildings; and
6. to avoid undue concentration of population.

To accomplish these purposes, zoning has traditionally established districts regulating land use, population density, lot coverage, and bulk of structures.

When a zoning ordinance is developed in conjunction with a comprehensive plan it can serve as one of several legal devices for implementing land development proposals included in the plan. While the plan deals with use and intensity of development in a generalized way, the zoning ordinance, as a legal instrument, is very precise and exacting in detail.

In city neighborhoods, zoning is used to protect developed areas from the introduction of structures and/or uses that would be incompatible with existing development. In those cases where a neighborhood's character is in transition, the zoning ordinance can be used to guide that transition, bringing about orderly change instead of the random mixing of incompatible use that often precedes the complete decline of a neighborhood.

## 2. History of the Zoning Districts

Plats that created part of the street and lot pattern in the three study areas were recorded during the early part of the century, prior to 1920. It is believed the additional streets and lots not included in recorded plats were created prior to the turn of the century. The first zoning regulation was adopted by the City in 1931 and created virtually the same pattern that exists today. One significant difference however was in the potential maximum density. Within the D District, the predecessor of the R-8 District, density of 174 dwelling units per acre would have been possible in the area north of Sherwood and east of Bardstown Road as opposed to the current R-8 permitted maximum of 58 dwelling units per acre. The 1931 version of R-7, the C District, permitted 72 units per acre south of Sherwood and east of Bardstown Road, while the B District permitted single family and duplex structures in the current R-6 District in Crescent Hill between Frankfort Avenue and Grinstead Drive west of Stiltz. The Deer Park as well as Cochrane Hill, Crescent Court and northeast Crescent Hill were zoned to permit only single family structures.

The 1931 action to adopt a zoning district map was significant in that two decisions were made that have proven to be questionable based on contemporary experience. First, the density permitted in the residential districts far exceeded the density of units existing at that time. In 1931 and in

succeeding generations the condition of the residential structures and the desirability of the single family neighborhoods did not encourage the rapid redevelopment of property for the much higher permitted densities\*. Today, after forty years as the pressures for redevelopment increase, the strategy of substantial "over"-zoning should be reexamined.

The second decision in 1931 that has proven to be questionable was the policy of stripping the major streets Bardstown Road and Frankfort Avenue with commercial districts. Over the past forty years due to commercial pressures the once predominant residential character of these streets has been legally changed to commercial strips.

Over the years the zoning district pattern has changed surprisingly little in the study areas. In 1937 an original commercial district at the intersection of Hite and Grinstead Drive was replaced by the B District (duplex) and the A District (single family) along Crescent Court was changed to the B District in 1946. In the Bonnycastle area there was only one apparent change when the C District was expanded along Alta from Cowling Avenue to Barney Street. Over the same forty year period the districts have undergone change. The once overly permissive D District that originally allowed, theoretically, up to 174 units per acre was reduced to a maximum of 58 units per acre in 1945 and the C District was reduced from 72 units per acre to 29 and then increased to 34. The zoning districts were renamed in 1963 with D changed to R-8, C to R-7 and B to R-6. The creation of R-6 also permitted apartments or multi-family structures to be built in areas that were previously limited to single family and duplex structures.

3. Current Zoning Districts - Refer to Zoning District Maps 19, 20 and 21.

The zoning district pattern in the three neighborhood study areas reflects the predominant use of the land. However, the residential districts generally permit a much higher residential density than presently exists with the exception of the Deer Park area.

In Deer Park west of Bardstown Road the land is primarily classified as R-5 which permits a maximum density on land already subdivided of 7.2 single family dwelling units per acre. The density of development of over half of the blocks in Deer Park exceeds the currently permitted density through a combination of single family structure built on narrow lots and a scattered

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\* One observable trend, however, resulting from the zoning classification of the property has been the gradual increase in the number of dwelling units in previously single family homes through remodeling and an internal structural subdivision. The trend appears to be most prevalent in the Bonnycastle and Crescent Hill areas.

pattern of multiple family structures. The Deer Park area, as the other neighborhoods in the study, developed prior to the adoption of the Zoning District Regulations which accounts for the discrepancy with the current zoning limitations on development. That is, in the subject neighborhoods the land was subdivided into lots with less area than the minimum area permitted on land developed under the R-5 Classification today. Also apartment structures were built on some property prior to the adoption of the zoning regulations which would be prohibited by today's zoning districts.

For the area east of Bardstown Road the reverse of the Deer Park situation is found with the zoning districts permitting a much greater density than exists for the average block density figures. In the R-7 Apartment District along and south of Alta Avenue the block densities equal those of Deer Park but fall far below the maximum permitted R-7 density of approximately 34 dwelling units per acre. In the R-8 Apartment District along and north of Sherwood Avenue the density discrepancy between existing and maximum is even greater. Current block densities for blocks that do not include a single family district range from approximately 8 to 15 dwelling units per acre compared to the potential maximum density of 58 dwelling units per acre under R-8. Within both the R-7 and R-8 Districts are properties that have developed as multiple family structures, some before and some after the adoption of the Zoning District Regulations.

In addition to the residential districts is a strip commercial district, C-2 along Bardstown Road. Within the C-2 District are a variety of general and neighborhood commercial establishments with a limited number of residential structures.

The zoning district pattern in Crescent Hill is characterized by conditions similar to those in Bonnycastle. The large R-6 Apartment District that covers the acre bounded by Grinstead Drive, Stiltz Avenue and Frankfort Avenue contains average block densities of approximately 5 to 8 dwelling unit per acre as opposed to the permitted maximum of 17.4 units per acre permitted under R-6.

In the Cochrane Hill area, along Hillcrest and Pennsylvania Avenues north of Frankfort Avenue in the Northeast Crescent Hill area and along Brownsboro Road at Lightfoot Road the predominant classification is the R-5 Residential District which permits single family structures. The average block densities for the existing development range from approximately 2 dwelling units per acre on Cochrane Hill to 5 dwelling units per acre along Pennsylvania Avenue and in the northeast area. Even though the density potential under R-5 is greater than that existing, an increase is not likely since only one single family structure is permitted on each lot.

The only opportunity to increase the density would be to subdivide the large lots into two smaller ones. It is unlikely that such an event will occur frequently in the foreseeable future.

Other zoning districts of note are the commercial strip along Frankfort Avenue west of Stiltz and adjacent to the northeast area. Also a vacant R-7 Apartment District of approximately 2 acres lies along the northern edge of the Northeast area. Finally, a C-2 District exists along Brownsboro Road opposite Country Lane for the existing neighborhood shopping area.

#### F. Utilities

A preliminary review with the affected utility companies indicates that the utility infrastructure of sewer and water lines have a sufficient capacity to sustain the existing or an enlarged number of customers in the tornado study area. It is also understood that surface drainage is handled satisfactorily so that chronic drainage problems do not exist as they do at other locations in the county.

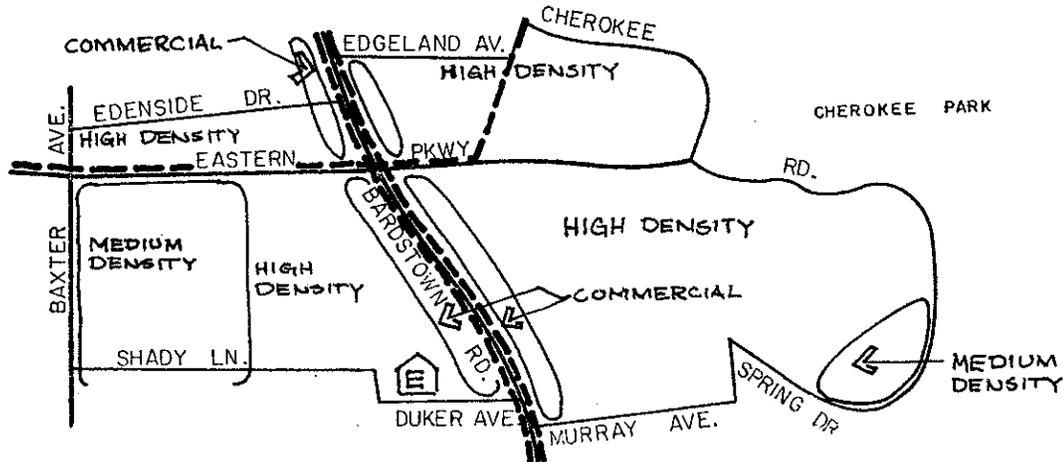
## COMPREHENSIVE PLAN GUIDELINES

### A. Deer Park - Bonnycastle Area

According to the Comprehensive Plan, the most appropriate land use for most of this area is high density (more than 12 dwelling units/acre) residential. There are, however, some exceptions to this general statement. The prime exception is the corridor of commercial development that is shown along both sides of Bardstown Road. In addition, there is a section of medium density residential development (3-12 dwelling units/acre) shown in the area bounded by Eastern Parkway to the north, Norris Place on the east, Shady Lane (the limit of the study area) to the south, and Newburg Road to the west.

The Plan shows only one community facility within the study area - Longfellow Elementary School, located on Duker Avenue.

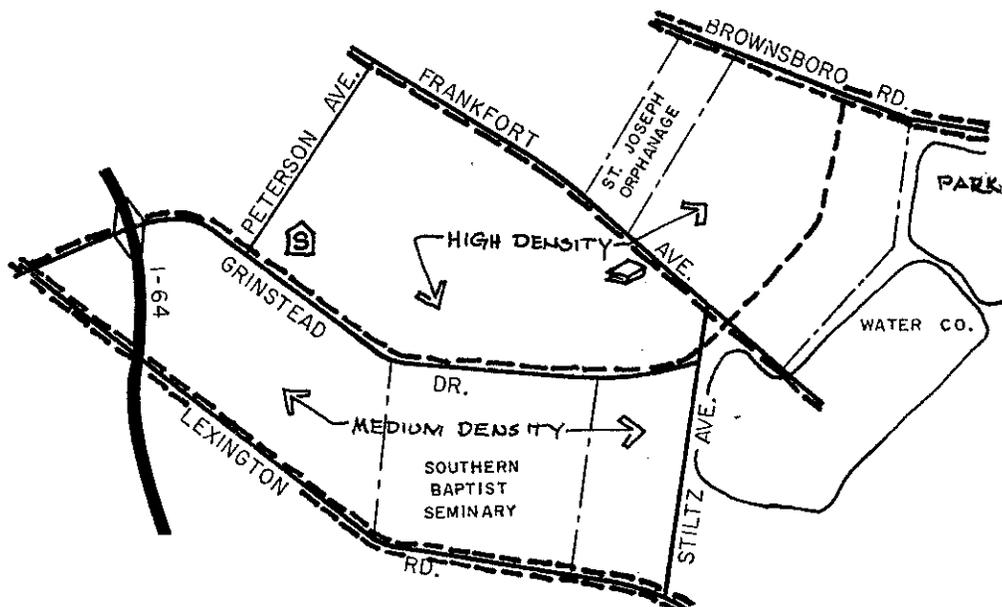
Three elements of the transportation system are included in the Deer Park - Bonnycastle area. Bardstown Road is shown as a major highway, and Eastern Parkway and Newburg Road are both shown as arterials.



### B. Crescent Hill

The Comprehensive Plan shows high density residential use to be appropriate north of Grinstead Drive, west of the Water Company and south of Brownsboro Road. The Plan shows medium density residential use to be appropriate south of Grinstead Drive to Stiltz Avenue. The Plan also recognizes the Southern Baptist Theological Seminary, Barrett Junior High School and the Crescent Hill Library on Frankfort Avenue.

Grinstead Drive is designated as an arterial on the Comprehensive Plan. A realigned intersection is shown between Hillcrest and Stiltz Avenues at Frankfort Avenue, thus providing a continuous traffic pattern from Grinstead to Stiltz to Hillcrest. Stiltz, Frankfort and Hillcrest Avenues are all designated as arterials on the Plan.



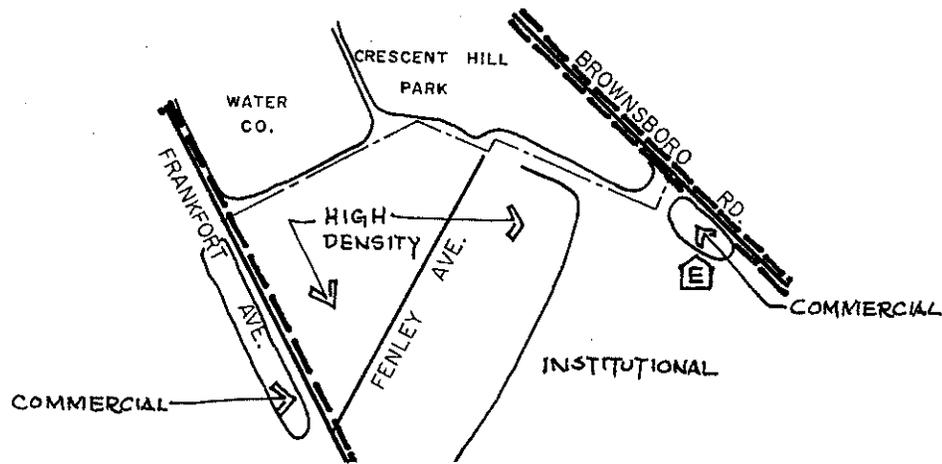
### C. Northeast Crescent Hill

The Comprehensive Plan shows high density (greater than 12 dwelling unit/acre) residential use to be appropriate north of Frankfort Avenue in the area extending from the Masonic Home for Widows and Orphans on the east to the Louisville Water Company on the west, both of which are shown as institutional uses. The north side of the high density area is bounded by Crescent Hill Park which extends northward to Brownsboro Road.

The Plan shows a variety of uses to be appropriate in the small section included south of Frankfort Avenue. A commercial strip is shown along Frankfort Avenue. The rest of the triangle is shown as medium density (3-12 dwelling units/acre) residential with an elementary school (Field) and park (Crescent Hill Playground) on the western edge of the area.

The area to the north of Brownsboro Road is shown as medium density residential with a small area of high density residential at the northeast corner of the area.

The Plan shows Frankfort Avenue as an arterial street and Brownsboro Road as a major highway.



#### D. Principles

In applying the mapped land use element of the Comprehensive Plan described immediately above for the three areas, the following principles, #5 and #7, of the Residential section of the Plan should be recognized.

- " 5. EXISTING SOUND RESIDENTIAL AREAS - NEIGHBORHOODS - SHOULD BE CONSERVED, AND DETERIORATED RESIDENTIAL AREAS WITH REDEEMING QUALITIES SHOULD BE REGENERATED.

Reasons: The preservation and rebuilding of existing residential areas should (a) insure a wide variety of living environments from which the citizens may choose; (b) assist in the retention and strengthening of existing neighborhood social structures; (c) help maintain the economic integrity of private investments in home and businesses, and the public investment in public facilities.

7. HIGH DENSITY DEVELOPMENT SHOULD OCCUR IN LOCATIONS WITH IMMEDIATE OR CONVENIENT ACCESS BOTH TO MAJOR STREETS OR HIGHWAYS AND TO SHOPPING AND PUBLIC FACILITIES.

Reasons: For the foreseeable future, the automobile will continue as the primary means of transporting people in Louisville and Jefferson County. Residences generate traffic just as commercial enterprises do. Most residents produce an average of about 6 vehicle trips per day. It is not difficult, then, to visualize the amount of auto traffic entering and leaving a large residential development with an average density of 20-30 dwelling units per acre. Street layouts designed for servicing

residential densities of four to eight dwelling units per acre should not be subject to traffic demands created by densities of twenty to thirty such units per acre. For this reason, high density development should be located so that its traffic empties onto streets designed to carry relatively large numbers of motor vehicles. These streets would be primarily the routes proposed on the transportation element of the Comprehensive Plan. (Notice on the Plan that the proposed location of higher density areas are related directly to the proximity to a major street or highway.) The street and road system proposed in the Plan is designed to accommodate traffic volumes projected for 1990. It is likely, however, that even this system would, along some routes, be unable to efficiently handle the demand. Therefore, in order to most effectively use the developing street system, the plan should (a) promote the most convenient possible access for the largest traffic generators, and (b) shorten the length of as many vehicle trips as possible."

## COMMUNITY PARTICIPATION

### A. Summary of Survey

The citizen input for the Post Tornado Planning Study was initially gathered by using a questionnaire (Appendix 2) developed for the Crescent Hill Community Council which asked what do you like most and least about your neighborhood? The questionnaire was distributed at public meetings in each neighborhood. The purpose of the meetings was to discuss the recovery planning program for the stricken neighborhoods. Approximately five hundred people attended the public meetings and one hundred seventy-five questionnaires were filled out and returned, one hundred twenty in Crescent Hill and fifty-five in Bonnycastle.

Following analysis of the questionnaires and initiation of the field inventories the Planning Commission staff held an additional meeting in Crescent Hill and the Highlands to give the neighborhood residents an opportunity to review, and correct if necessary, any of the Commission's work prior to completing the study. At these meetings the residents were given an opportunity to review the results of the questionnaire, and the analysis of the land use, transportation, parking, park and recreation and zoning.

The results of the questionnaire should be viewed with a certain degree of caution because they do not necessarily reflect the opinions of the entire neighborhoods. The geographic scope of the Post Tornado Planning Program was limited to only those areas stricken by the tornado and this area did not correspond to neighborhood boundaries as established by existing neighborhood organizations. The respondents were not scientifically selected and consequently the results do not necessarily reflect those of a cross section of the neighborhood as is evident from the socio-economic comparisons contained in Appendix 1 & 2. The results of the questionnaires are useful, however, in reflecting the general concerns of those residents who attended the neighborhood meetings and returned completed questionnaires. Development of formal goal statements for the specific neighborhoods would require considerably more work from everybody, neighbors and local officials alike.

#### 1. Bonnycastle Summary

The proximity to "town and (Cherokee) park" was the most liked characteristic of the Bonnycastle neighborhood. Various attributes of the area residents such friendliness and variety were also cited in this section of the questionnaire.

In response to what they liked least about the area, the respondents cited the lack of or inadequate services and facilities as the number one priority. More specifically, fifty-eight percent of the total vote in this category was related to inadequate trash collection, litter and garbage pick up. The overhead utility lines in both the streets and the alleys of the neighborhood were also mentioned in this category.

The issue of neighborhood beautification was the second least liked situation in the neighborhood. The respondents cited a general lack of maintenance of both residential and commercial properties.

The problems of transportation in the neighborhood were the third priority according to the analysis of the questionnaire. Fifty-four percent of the responses in this category were in reference to parking problems in the neighborhood.

The final major dislike of the respondents demonstrated a dislike of and concern for the possibility of the construction of new apartment complexes in the Bonnycastle area.

The most important recommendation for improving the area was one of neighborhood beautification. Twenty-five percent of the total vote in this category was related to improved street and alley maintenance. Improved property maintenance received twenty-four percent of the vote, while twenty-three percent of the responses were in reference to improved trash collection and litter control programs.

Improved services and facilities was the second priority recommendation of those responding to the questionnaire. Improved police protection received slightly less than half the vote in this category, while undergrounding of the utility lines received twenty-eight percent of the vote.

Sixty-four percent of the vote cast for the third most recommended improvement, a better transportation network in the neighborhood, was in reference to (re)studying the traffic needs of the area, including the possibility of establishing one-way pairs. A recommendation for improving the local parking situation received twenty-nine percent of the vote.

The final major category of recommended improvements was indirectly planning related. Eighty percent of the votes cast in this category indicated a preference for single-family rather than multi-family housing in the neighborhood. Fifty-nine percent of the total responses was directly related to some aspect of the zoning in the neighborhood, both current and future.

## 2. Crescent Hill Summary

The general convenience of the area was the characteristic the Crescent Hill residents identified as most liked. The character of the neighborhood, i.e. the old homes, the trees and the quietness, and the friendliness of the neighbors themselves were also highly regarded.

Based on the results of the questionnaire, the residents least liked various aspects of the commercial facilities in the neighborhood. The most common complaint was that of poor maintenance and generally shoddy appearance of the existing businesses along Frankfort Avenue. Other points of dislike were the "Headrest" (a tavern on Frankfort Avenue at Stiltz), the billboards along Frankfort Avenue, "encroaching commercialism", and the lack of facilities to meet the neighborhood needs.

The second priority in the least liked category in the Crescent Hill neighborhood was the lack of or inadequate services and facilities. Slightly less than half the votes in this category was related to what the Crescent Hill residents termed the inadequate provision of "essential" city services, including police protection, sidewalks, street lighting, transit service, and "lack of interest from City Hall". Fifty percent of the vote in this specific issue was related to what the residents of the area felt was inadequate police protection. The inadequacy of the local park and recreation facilities, a separate issue in this category, received slightly over one quarter of the total vote.

The third most important issue to the respondents was that of neighborhood beautification. Three quarters of the voting in this category was directly related to the upkeep of residential property both owner and renter occupied. The remainder of the concern in this area was related to upkeep of the business property in Crescent Hill.

The remaining areas of concern to the Crescent Hill respondents were an apparent dislike for apartment complexes, especially by the older home owners, inadequate parking, and various aspects of the L&N railroad along Frankfort Avenue.

Those who attended the meeting were also asked to identify their most important recommendations to improve the area. Their most important recommendation was one of neighborhood beautification. Over one quarter of the total vote in this category was cast for one item, replanting the trees in the neighborhood.

The second most important recommendation of the Crescent Hill respondents was the creation of a sense of community in the area. Slightly over fifty percent of the vote in this category was related to maintaining the character of and encouraging pride in the neighborhood.

The encouragement of single family home ownership was the next most important recommendation of the respondents, followed by improved recreation and open space and improved services and facilities, which were fourth and fifth priorities respectively. When these latter two categories are combined as they were in the "like least" section, their improvement becomes equivalent to the second priority recommended for improvement as it was in the preceding section.

While not significant in terms of the votes received, an interesting recommendation of the respondents was that of doing appropriate planning. This issue was specifically mentioned as such only in Crescent Hill. A final vote of interest was the recommendation of improved zoning enforcement.

For a more detailed breakdown of the results of the questionnaires, see Appendix 1 & 2. Anyone wishing to review the actual questionnaires may do so at the Planning Commission office in the Fiscal Court Building.

#### B. Tornado Service Centers

On May 2, 1974, the Planning Commission authorized the expenditure of surplus salary funds from the Commission's budget to operate two tornado service centers. The principal expense involved was for the retaining of an architect and attorney to staff each of the centers. The centers' primary function was to make available free professional advice to the victims of the tornado. It was anticipated that the principal kind of assistance needed revolved around decisions faced by property owners of if and how repairing or rebuilding of their property should occur. The Home Builders Association and representatives of local lending institutions also volunteered their time to participate in the centers as needed.

The centers began operating on May 18th in space provided by Bardstown Road Presbyterian Church in Deer Park - Bonnycastle and St. Marks Episcopal Church on Frankfort Avenue in Crescent Hill. At the close of operating hours on May 28, 1974 the Bardstown Road center had received inquiries from approximately 37 persons and the Frankfort Avenue Center had received 67 inquiries.

These local residents received legal assistance in reviewing contracts, their insurance policies, and the Internal Revenue Service regulations for deducting storm damage on their tax returns. Architectural assistance was given in preparing sketches for various aspects of rebuilding and in reviewing damage estimates.

It is anticipated that the provisions of such assistance will be evaluated during early June to determine if the continued operation of the centers is warranted.

## IMPLEMENTATION RESOURCES

An tentative examination of potential resources was made to attempt to identify funding sources and mechanisms for implementing of action that could result from this report. Each resource will have to be examined in greater detail to determine whether it can be tailored to yield the desired results for the proposed neighborhood programs.

### A. The "Disaster Relief Act of 1974"

Only those aspects of this Act of specific and immediate concern to the citizens and officials of Louisville and Jefferson County will be examined at this time. While detailed discussion of administrative procedures and actual implementation of the provisions contained therein must await the adoption of guidelines, currently being written by the U. S. Department of Housing and Urban Development, there are some provisions of the Act which can be discussed at this time. The Planning Commission staff has been and will continue to monitor the passage of this act and the development and interpretation of the necessary guidelines. Once the guidelines have been approved by Secretary Lynn of HUD, they will be published in the Federal Register, copies of which will be on file in the Planning Commission Offices.

While the Act itself did not become law until late in May, the effective date of the Act is such that the losses incurred in the April 3, 1974, tornado are generally recoverable. The Act makes grants available to local governments for the repair and restoration of damaged or destroyed public facilities. Section 402 of the Act defines "public facilities". The following aspects of that definition appear to be most applicable to the local situation: water supply and distribution systems, airport facilities, any non-Federal aid street, road, or highway, or other public building, structure, or system, including those used for educational or recreational purposes, and any park. This same section of the Act also makes grants available to selected private non-profit organizations. The Act does not specify, however, whether these private non-profit organizations may apply directly for the grants or must do so through and in conjunction with local government.

There are two alternatives or formulae which will be used to determine the amount of the grant. One alternative provides for 100% recovery of losses if the facility is replaced based on the design of the facility, including bringing it into conformity with current applicable codes, at the time of the disaster. The intent of this section of the Act is to provide for Federal payment for a new facility that would provide the same capacity as the old facility if it were to be built today according to up-to-date standards. Example (1): If a 400 pupil school constructed in 1950 was designed on then existing criteria to provide a

certain number of square feet per student, a cafeteria and library, but no gymnasium or swimming pool, the Federal contribution would be available to the amount that would be required for a 400 pupil school with a cafeteria and library. It would not pay for a swimming pool and gymnasium even though such amenities would be required if the school were to be built now. Nor would the Federal Government pay for a 600 pupil school which would be called for if the school were to be designed new today. If, however, today's standards called for a greater number of square feet per student the Federal contribution would properly pay for space based on the new figure; similarly, lighting levels, plumbing, and installed fixtures based on 1974 levels rather than 1950 criteria would be used in determining the Federal contribution.

Local officials may also elect not to replace or repair a damaged or destroyed facility in which case the Federal grant will be 90% of total losses. Grant funds received under this provision may be used to replace or repair only selected facilities or to construct new ones which the local officials feel are more appropriate in light of the needs of the disaster-affected area.

In either case, and regardless of the exact nature of final guidelines, local government will have to prepare a comprehensive list of damaged facilities and replacement cost estimates.

Section 408 of the Act also makes provisions for grants to individuals and/or families of up to \$5,000, in those cases where other government programs or insurance coverage is insufficient to meet disaster-related expenses. Criteria for eligibility and application for such a grant will be contained in the forthcoming guidelines.

#### B. Other Federal Programs

Once the precise implementation needs and desired programs are outlined it may be evident that additional money is needed to carry out the complete program. The most efficient way to pursue additional federal funds would be to work through the Region IV Federal Regional Council.

The Small Business Administration has programs for private individuals and businesses which provide for long term, low interest loans, generally thirty years and five percent respectively. As of the close of business the local office of the SBA had accepted applications for 97 home and 17 business loans. Of these, 51 home and 9 business loans had been approved. The current deadline for application for these disaster relief loans from SBA is June 28, 1974.

### C. State Programs

The State of Kentucky Office of Local Government, is currently investigating the feasibility of providing a vehicle to finance the implementation of community development (under provision of KRS Ch 99) where the financial burden is carried by the private sector. Questions concerning the applicability of this program were raised during the Post Tornado Planning Program. Having reviewed the specifics of this program with representatives of the Office of Local Government and representatives of Dupree & Company, Inc., a Lexington consulting firm, the Planning Commission staff does not feel that this particular technique has application in the tornado stricken areas at this time. It is however an innovative technique which may well be appropriate for the implementation of projects unrelated to the tornado recovery effort, at a later date. The community development program provides a means for reinvesting a portion of the tax revenues generated by new development in an area. The increased revenues which are likely to be generated by the reconstruction of the tornado stricken neighborhoods will not in all probability be sufficient to justify the establishment of such a program for these areas\*. The representatives of the Office of Local Government and Dupree & Company, Inc. have concurred with this finding.

\* A second deterrent to using the community development program is the time delay required by the state to develop the program and test its legality.

### D. Local Programs

In some instances, local funds may be the only source of money for project implementation. Again, the local officials must choose from among several alternatives or combinations thereof.

The most obvious alternative is funding through the normal capital budgeting process. The City is currently considering its capital budget for fiscal 1974-75 certainly, not all of which can be diverted to the tornado recovery program. However, some reconsideration of priorities might be in order so that the more crucial aspects of the recovery program may be initiated as soon as possible.

A related alternative source of funds would be through the issuance of revenue bonds (KRS 58.000, 130.000) assessment bonds (KRS 107.000) or general obligation bonds (KRS 94.000). The specific application of any or all of these methods would have to be determined in light of specific projects. For example, the provision of public off-street parking in the Bardstown Road area to serve commercial establishments could be financed with revenue bonds retired by parking meter revenues whereas the widening of a street or alley would require another method of financing.

The fund raising efforts of Trees, Inc. could have a direct impact on the restoration of the destroyed trees. It appears that the restoration of Cherokee and George Rogers Clark Parks will be funded through the "Disaster Relief Act of 1974". The Act specifically defines the term "public facility" as including parks. Thus for the purposes of Section 402 of the Act, the repair, restoration, reconstruction and replacement of a public facility will, in the case of a park, include restoration of natural features including trees and other vegetation to the extent practicable. It does not appear however that the provisions of the Act will provide for the replacement of street trees in the public right-of-way or trees on private property. To this extent, the success of Trees, Inc. will have a direct and possibly significant impact on the restoration of the character of the tornado-stricken neighborhoods. Replanting of the trees and vegetation in these areas should be guided by the considerations outlined in "Recommendations, Section C (2)".

## RECOMMENDATIONS

The recommendations contained in this report are made as the first step in a public decision making process that is intended to investigate a series of problems in the tornado damaged neighborhoods. Because the recommendations represent the initial step, additional refinement, the investigation of possible alternative solutions and the identification of public costs to be borne to support the improvements should be made. This process is particularly applicable to the following list of improvements suggested for public investment opportunities.

In reviewing and further refining the body of recommended actions, the relationship of separate actions should be kept in mind. For instance, it would be of limited benefit to make improvements to the recreation facilities available to the neighborhoods without insuring that necessary improvements are made to provide access to the facilities. The building of mid-block sidewalks to allow access to the improved park facilities could be a separate but directly related act.

### A. Comprehensive Plan

Because the current study was limited to the general path of the tornado it does not represent a comprehensive review of the entire Deer Park, Bonnycastle and Crescent Hill neighborhoods. After examining the study areas it is apparent that a re-examination of the Comprehensive Plan recommendations is warranted but it should be done on a neighborhood-wide basis. An example of the questions uncovered is the long-range high density residential pattern recommended for Crescent Hill north of Grinstead Drive. With current densities ranging from approximately 5 to 8 dwelling units per net acre, development in the high density range of more than 12 dwelling units an acre would represent a doubling or tripling of the existing density. While the long-range recommendations of high density residential use may be consistent with overall community objectives, it must be implemented only in concert with other physical improvements to, for example, the local street system. The conversion to high density use must also be reviewed in light of the existing socially and physically viable neighborhood which has been developed in the medium density range. The Comprehensive Plan recommendations for land use should be reviewed, therefore, for each of the three neighborhoods in conjunction with a neighborhood planning study for the entire neighborhood.

It is recommended that the land use element of the Comprehensive Plan not be changed at this time.

## B. Zoning District Changes

Recognizing that the Comprehensive Plan recommends long-range land use patterns, it is important when planning for an already developed part of the urban area, such as the three study areas, to recognize the existing development and propose zoning controls that control current day-to-day activities. The Comprehensive Plan principles cited earlier during the review of the plan's guidelines appropriately urge the conservation of sound neighborhoods and placing of high density residential development in areas with adequate access to streets and supporting facilities.

In review of the existing zoning district patterns in the three neighborhoods the following characteristics were observed:

- the density of existing residential development
- access provided by the street system
- the potential density that could be developed under the current district
- the rebuilding options available to the property owner that faces complete reconstruction as a result of the tornado damage.

### 1. Deer Park - Bonnycastle, refer to Proposed Zoning District Map 22.

No changes are recommended at this time for Deer Park. The area reviewed was substantially developed with single family structures and is classified as R-5 Residential which permits only single family structures. The current District should therefore provide some measure of protection and stability to the neighborhood. It should be recognized, however, that much of the area was developed with a lotting pattern and density that does not meet the minimum requirements of the R-5 District. As the structures continue to age and eventual reconstruction is required, a zoning change may well have to be given serious consideration. The opportunity to build new single family structures on lots as narrow as 30 feet will continue to be very limited by the economics of construction and the preference for types of residential structures.

In Bonnycastle, a zoning district change is recommended for consideration. The R-7 and R-8 Districts bounded by Eastern Parkway, the Bardstown Road commercial corridor, Murray Avenue and the R-5 District on the east side is proposed to be reclassified R-5A with the exception of certain internal areas proposed for higher densities. The R-5A District is a new district recommended to be considered as an amendment to the Zoning District Regulations. Its basic controls are proposed to allow single family, row

houses and apartments but to limit the maximum density to 12 dwelling per net acre. In addition, the minimum lot size will be 6,000 square feet with 3,625 square feet required for each dwelling unit on a lot with more than one unit. In order to develop a duplex, the lot would be required to contain 7,250 square feet (or 2 x 3,625) and as each additional dwelling unit is added, the property must contain an additional 3,265 square feet. The district is more fully outlined in Appendix 4.

The primary purpose for proposing the creation of the R-5A District is to fill the current gap in the zoning controls that exists between R-5 and R-6. The R-5 District restricts development to approximately 7.2 single family detached dwelling units per net acre while R-6 permits any type of dwelling unit up to 2 1/2 stories in height and 17.3 units per net acre. The R-5A District is proposed to accommodate the higher densities typically found in predominately single family urban neighborhoods that cannot be reasonably controlled by the R-5 District. In such single family urban neighborhoods the R-6 District may also be too permissive in allowing lot by lot piecemeal development at a density substantially greater than the current average level.

The application of the R-5A District as proposed would result in ensuring new development in the same approximate density range as the current development. It would also require that the existing single family structures on lots of less than 6,000 square feet, such as the west end of Sherwood, could be redeveloped only as single family structures or combined with neighboring lots to gain sufficient additional land for a duplex or a multi-unit building. The existing lots that either contain too little land to meet the minimum lot size for the R-5A District or contain too many units would become nonconforming uses.

The density ceiling of 12 units per acre on new development would also help ensure that the existing inadequate streets, Sherwood, Alta, Bonnycastle, and Murray would not have additional substantial traffic or parking load placed on them. The improvements contained in the following recommendations for street and parking facilities are viewed as measures required to solve the existing circulation and parking problems. The improvements are not viewed as sufficient, necessarily, to allow the redevelopment of the neighborhood under substantially higher density than currently exists, such as would be permitted under R-7 or R-8.

It is proposed that changes in the zoning district pattern north of Eastern Parkway and east of Bardstown Road not be considered as a result of this study. The Planning Commission is concurrently preparing a study of the Cherokee Triangle which will address zoning for the subject area in the context of a neighborhood planning program for the entire Triangle area.

2. Crescent Hill, refer to Proposed Zoning District Maps 23 and 24.

Two general zoning district changes are proposed for Crescent Hill, R-6 to R-5A and R-6 to R-5 in areas shown on Map 23. In addition, adjustments are proposed in the existing commercial strip along Frankfort Avenue to include existing commercial uses in a commercial district and place residential and institutional uses in a residential district.

The R-5 District is proposed for a predominately single family area along Birchwood, Bayly, Hite and Franck Avenues. The known multi-family structures in the area would become nonconforming. It should be noted that, based on available information, over half of the multi-family structures are currently nonconforming in that they have been developed at a density in excess of the R-6 limitations.

The area proposed to be placed in the R-5A District between Birchwood and Stiltz Avenues contains numerous multi-family structures that meet the density requirements of the new district. The remaining properties if redeveloped would raise the overall density of the district; however, due to the relatively good potential access to the area from both Frankfort Avenue and Grinstead Drive the increased density could be accommodated. It is important that improvements to the street pavements and provisions for off-street parking, as contained in the following recommendations, be made to meet existing needs as well as to accommodate additional development that may occur.

The R-5A and R-6 Districts along Grinstead Drive have been defined to accommodate the tornado related rebuilding efforts centered in this area\*. The R-6 District includes a concentration of lots that will apparently have to be rebuilt entirely due to the tornado damage. The current lots have too little area to permit construction of more than a single family residence under R-5A. The choice of R-6 would permit the owners of the individual lots to build either single family or duplex structures. Lots could also be combined for row houses or other multi-family structures. The selection of R-6, thus, is to permit the owners an alternative in rebuilding.

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\*It is assumed that due to the cost of construction of new residences, the owner of structures destroyed by the tornado may require a district classification that permits some flexibility in density and structural type.

Most of the lots located in the R-5A District that will be rebuilt due to tornado damage are sufficiently large to be able to accommodate alternative plans for either a single family or duplex structure under the minimum requirements of that proposed district.

The zoning district recommendation set forth above to enable rebuilding of demolished or substantially damaged structures is based on available information. The zoning districts proposed may require additional review as plans for private reconstruction are made. (See recommendation D, following). The impact of any changes in the zoning district pattern proposed above will, however, require careful scrutiny to determine its compliance with overall community objectives for the property and neighborhood.

The zoning district pattern north of Frankfort within the study area does not have any suggested changes with the exception of the R-5A District in lieu of the R-7 District on Fenley Avenue. Generally, the existing R-5 District is consistent with the predominant single family use of the area. The R-7 District on the other hand is currently vacant and if developed could increase the traffic traversing the predominately single family area. The R-5A would permit flexibility of building types at a density more consistent with the existing than would be likely under R-7.

### 3. Building Permit Moratorium

A moratorium on the granting of Building Permits was placed on three areas by Mayor Sloane to run through June 10, 1974, until the results of this study could be evaluated. The justification for the moratorium was to prevent precipitous redevelopment of storm damaged properties under the provision of the current zoning districts at a density far greater than exists at present. After reviewing the results of this study it is evident that such a justification will now apply to a rather limited area, approximately paralleling Grinstead Drive from Hite to Stiltz Avenue.

It is suggested that:

- a. the moratorium be continued for the severely damaged area along Grinstead Drive for a period of time, perhaps two months, to provide the Planning Commission and the Board of Aldermen sufficient time to evaluate the advisability of zoning district changes. During this time period constructive replanning efforts, such as outlined in recommendation D that follows, could be continuing.

- b. the moratorium in effect elsewhere in the Bonnycastle and Crescent Hill Area be lifted unless it is determined that there is sufficient community interest to be served by preventing the reconstruction of property under the R-6, R-7 and R-8 Districts until the zoning district changes contained in this study are evaluated by the Planning Commission and Board of Aldermen. The continuation of the moratorium in these areas cannot be supported on the premise of controlling redevelopment of storm damaged property but may be justified as a device for preventing additional redevelopment under current zoning districts that permit density at a greater level than found as existing average density levels through the areas.

#### 4. Additional Study Required

As cited previously the focus of the current study is on the parts of the neighborhoods struck by the tornado. It is apparent that parts of Bonnycastle south of Murray Avenue and parts of Crescent Hill west of Franck and north of Frankfort Avenues should be examined for the relationship of the current zoning districts to plans prepared for the entire neighborhood. The boundaries then for the areas to be considered for zoning district change were fixed by the limits of the study and may not necessarily be the limits of the eventual recommended changes.

### C. Public Investment Opportunities

The following recommended actions are intended to ease the circulation, parking and neighborhood recreation problems. The series of actions are presented as the initial step in the decision making process. The proposals should be further refined by:

- refinement through engineering studies
- development of cost estimates
- identification of the benefits to be derived. For example, the widening of the pavement of streets should be reviewed in light of the benefits derived for circulation and parking and the potential negative aspects if street trees were required to be removed.

#### 1. Parking and Circulation, Refer to Recommended Circulation Plan Map 25, 26, and 27.

The maps indicate a variety of proposals summarized below. The numeral indicates the general priority believed to be appropriate; that is, those labelled (1) are generally believed to be more important than those labelled (2) or (3). Within the three general priority categories actions are further refined by a lower case letter designation.

Items labelled (a) are believed to be more important than (b) or (c), etc. For Bonnycastle area, for instance, the total list of actions is ranked according to their general priority relative to the action listed for the other areas. The Bonnycastle list also indicates the desirable sequence of events for that particular area.

Recommended actions to improve the circulation and parking pattern in the three areas in order of priority and sequence are:

#### Bonnycastle Area

- 1e. Improve the intersection of Sherwood and Cherokee Road
- 1f. Develop circulation connectors between Sherwood and Eastern Parkway
- 1g. Extend the alley (as shown on Map 25)
- 3a. Improve alleys for off-street parking between Sherwood, Alta, Bonnycastle and Murray.
- 3b. Align the intersection of Chichester Avenue and Parsons Place
- 3f. Improve circulation by eliminating on-street parking as off-street parking increases through alley improvement and making necessary traffic flow changes.

#### Deer Park Area

- 2a. Widen pavement of Norris Place between Eastern Parkway and Stevens
- 3c. Improve alleys for off-street parking between Edenside, Eastern Parkway, Jaeger, Sherwood, Stevens, Bonnycastle, Shady Lane and Duker Avenue
- 3e. Extend and develop an alley in the block bounded by Quadrant Avenue, Norris Place, Eastern Parkway and Stevens Avenue
- 3f. Improve circulation by eliminating on-street parking as off-street parking increases through alley improvement and making necessary traffic flow changes.

#### Crescent Hill Neighborhood

- 1a. Align Stiltz and Hillcrest
- 1b. Widen Birchwood Avenue
- 1c. Widen Kennedy Avenue
- 1d. Improve alleys between Hite, Bayly, Birchwood, Kennedy and Crescent Court.
- 1h. Improve the intersection of Hite and Grinstead.
- 2c. Improve access to Crescent Hill Park from Pennsylvania Avenue (Pedestrian and Bike)

- 3d. Improve other alleys in Crescent Hill Neighborhood.
- 3g. Improve circulation by eliminating on-street parking as off-street parking increases through alley improvement and making necessary traffic flow changes.

#### Northeast Crescent Hill Area

- 2b. Develop bike and pedestrian path to Crescent Hill swimming pool, Chenoweth School and Brownsboro Road shopping area.
- 3h. Improve alleys in Northeast Crescent Hill area.
- 3i. Improve circulation by eliminating on-street parking as off-street increases through alley improvement and making necessary traffic flow changes.

In considering the implementation of the above action, consideration should be given to a joint city-private property owner program. For example, the paving of the alley between and parallel to Crescent and Kennedy Courts should be done only if a substantial number of private property owners agree to develop off-street parking pads or garages along the alley. The city in constructing the alley could perform the engineering services for both the public and private property improvements and arrange for and supervise construction. The neighborhood would benefit by lessening the demand for parking on the streets and the property owner would benefit by gaining off-street parking spaces at a lower cost gained through the economics of the joint paving program.

## 2. Recreation and Landscaping, refer to Maps 29, 30 and 31.

### a. Recreation

The recreation plan recommends several locations to be explored for the development of neighborhood recreation facilities. The park area located opposite from the Crescent Hill swimming pool on Water Company property appears to be the most beneficial recommendation. Located on public property, the site is sufficiently large to provide a variety of recreation facilities including a ball diamond. The residential area in Crescent Hill is proposed to be linked by a walk and bike path system to the proposed park, the swimming pool, the residential area in the Northeast section and the playground facilities at Chenoweth Elementary School.

A small park area located in the center of Kennedy Court could also prove of significant value to the immediate residents. This area has a paucity of recreation facilities and the Kennedy parklet could provide intensive recreation space for a variety of age groups.

The park between Bayly and Birchwood, although geographically well situated, has limited potential due to the topography of the site.

Finally, the tot lot proposed to be constructed on Cherokee Park land at the intersection of Sherwood and Cherokee Road should prove to be a valued neighborhood asset. Located on Sherwood, near Barney Avenue, the tot lot will be accessible by a relatively large part of the population in the Bonnycastle area currently underserved by playground facilities.

b. Landscaping

It is proposed that the trees lost along the streets be replanted. A partial requirement for the areas that need replacement trees is listed on the accompanying map. Additional surveys should be carried out to determine the locations where additional trees were destroyed. The map also presents locations where street trees did not previously exist which appear to be capable of supporting such plants. It is proposed that such areas be considered in a replanting program.

It is further suggested that the sugar maple tree be planted to replace the water or silver maples that were prevalent among the destroyed trees. The sugar maple will, over the years, provide a similar street canopy and blend in with the remaining silver maple trees. The sugar maple has a deeper root system than the silver maple and will therefore not be as detrimental to sidewalks. Additional information regarding the sugar maple is contained in Appendix 4.

The opportunity for additional landscaping projects may be generated by the installation of improvements cited under circulation and parking recommendations. For instance, if the Stiltz-Hillcrest connection were made there would be the opportunity to develop a landscaped sitting area in the right-of-way between the connecting pavement and the railroad.

D. The Private Rebuilding Process

For property owners facing the prospect of rebuilding their demolished residences the following three phase process is suggested:

Phase I - The Planning Commission should convene a meeting or series of meetings of property owners that must replace residential structures destroyed by the tornado. With the assistance of persons knowledgeable about alternative ways of packaging housing developments, alternative ways of rebuilding should be outlined. The costs and benefits of rebuilding through a joint venture on the part of the property owners should be emphasized. The interest of property owners should be assessed and if warranted, Phase II should be initiated.

Phase II - The Planning Commission and Board of Aldermen should consider the merits of the proposed zoning district changes.

Plans should be prepared for residential reconstruction consistent with the zoning districts determined in the step above.

Necessary steps to formalize the legal mechanisms for the joint venture (if required) should be prepared.

Phase III - Final arrangements should be made for financing and constructing the new structures.

The above process is suggested as a technique to bring together private individuals with professional guidance that may be able to identify an alternative to individual rebuilding efforts. Considering the economic considerations of joint action for the individual owner, and the community benefits gained through the opportunity to have replacement housing designed and constructed in a manner consistent with the neighborhood character the process is worth initiating. Whether or not the process will prove beneficial for the individuals involved can only be determined as the property owners and professional advisors begin to interact.

## APPENDIX 1

### MEMORANDUM

TO: Post Tornado Study File — OPD 790.32

FROM: Bob Cox

DATE: May 21, 1974

RE: Citizen Input — Crescent Hill

The following is a summarization of the results of the questionnaire distributed at a neighborhood meeting of the Crescent Hill Community Council on April 18, 1974. In excess of three hundred fifty people attended this meeting and one hundred and twenty filled out and returned the questionnaire.

The questionnaires were summarized according to key words or phrases in the answers to the individual questions. The initial summary was done by Bob Eury. The topical groupings on question five are Bob Eury's, those for questions six and seven are my own. In order to determine the weighted scores and thus the priority for each item, I worked on the assumption that the most important issue generally gets mentioned first and the least important last. A value of 3 was assigned to each item mentioned first, a value of 2 to the items mentioned second and a value of 1 to those mentioned third. The total weighted score was determined by adding the assigned values by item and category.

No demographic comparison of the respondents to the questionnaire and the neighborhood in general has been made. Bob Eury is handling this and I am assuming that it will be completed for inclusion in a later report.

The section on recommended improvements should be viewed as recommendations for the post tornado study area and not as goals, per se, for Crescent Hill. Further examination of these issues at the neighborhood level should be completed before a neighborhood goals statement is formalized. Some of the recommendations or lack thereof contained in this summary do not necessarily correspond to certain previously stated wants or desires of the neighborhood. A specific example is the desire for elderly housing in the area as voiced by some of the residents of Crescent Hill in comparison to the lack of strength of this issue contained in this summary.

Even at this preliminary stage there are some rather obvious implications for further problem definition and action by various local agencies and community organizations. Some of these are directly related to the Planning Commission, others are not. I would suggest that, to the best of our ability, we should identify specific functional responsibilities in our final report to the Board of Aldermen and the Mayor.

CRESCENT HILL

QUESTION #5 "Like Most"

	1st Line	2nd Line	3rd Line	Weighted Total
<u>Attitudes</u>				
Togetherness of Church Denominations	0	1	0	2
Community Spirit (#3)	3	4	3	20
Friendliness (#1)	12	6	4	52
Atmosphere (#4)	3	1	2	14
Stable Neighborhood (#2)	5	2	3	22
Predominance of Homeowners	2	1	1	9
Pride in Maintenance of Property	1	2	0	7
Interest in Neighborhood Preservation	1	1	1	6
Safe Neighborhood	0	0	1	1
This Place As My Home	1	0	0	1

	1st Line	2nd Line	3rd Line	Weighted Total
<u>Physical Environment</u>				
"Village-Like" Community	4	2	0	16
Well Kept Water Company	0	0	3	3
Quiet (#4)	7	2	2	27
Trees (#2)	16	13	5	79
Old Homes (#3)	8	10	7	51
Homes and Trees	5	0	1	16
Big Yards	0	2	1	5
Character of Neighborhood (#1)	20	10	9	89
Beauty	1	5	3	16
Light Volume of Through Traffic	0	0	1	1
Open Areas	1	0	0	3
Age of Area	0	1	0	2

	1st Line	2nd Line	3rd Line	Weighted Total
<u>Services and Facilities</u>				
General Convenience of Area (#1)	20	17	24	118
Churches	0	2	1	5
Schools (#2)	0	3	5	11
Schools and Churches	0	2	1	5
Close Proximity To Church	0	1	0	2
Shopping	0	1	0	2
Bus Access	0	1	1	3
"Headrest"	0	0	1	1
Athletic Association	0	0	1	1
Close Proximity to Job	1	1	1	6
Parks	0	1	1	3
Emmett Field	0	0	1	1
Recreation	0	0	2	2
Facilities In General	1	1	1	6

	1st Line	2nd Line	3rd Line	Weighted Total
<u>Socio-Economic</u>				
The People (#1)	18	9	4	76
Socio - Economic Diversity	1	4	0	11
Age Diversity	0	1	2	4
Stimulating Intellectual Activities	0	0	1	1

QUESTION #6 "Like Least" by Priority (Weighted Score)

#1 (96) Commercialization

- Primary focus on Frankfort Avenue
- 55% total vote referred to the "Headrest"
- 46% total vote referred to "Headrest" as first priority.

	1st Line	2nd Line	3rd Line	Total
Commercialization (General)	4	2	0	14
The "Headrest"	15	3	1	53
Bars and Liquor Stores	1	2	2	9
Some of Frankfort Avenue (Comm.)	3	2	0	13
Billboards on Frankfort	2	0	1	7
			TOTAL	96

#2 (74) Facilities: Lack of or Inadequate

- 45% Total vote related to provision of "essential" city services, including police protection, sidewalks, street lighting, transit service, and lack of interest from city hall (50% of this vote was related to police protection).
- 27% of the vote in this category was in reference to the inadequacy of the local park and recreation facilities.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
<u>Facilities: Lack of or Inadequate</u>				
Transit Service	0	2	0	4
High School	2	0	1	7
Eating Places	1	1	0	5
Specialty Shops on Frankfort	2	1	0	8
Sidewalks	1	0	1	4
Park Space	1	0	1	4
Recreation Facilities	0	3	0	6
Mini-Park or Tot-Lot	0	2	1	5
Community Center	1	0	0	3
Places for Youth	0	1	0	2
Essential City Services	1	0	0	3
Police Protection	1	0	4	7
Crime Rate	2	1	2	10
Street Lighting	0	1	1	3
Lack of Interest from City Hall	1	0	0	<u>3</u>
			TOTAL	74

#3 (65) Neighborhood Beautification

- 75% of the total was directly related to the upkeep of residential property in the area. The voting was equally split between rental properties and the lack of home improvements/unkept yards.
- The remainder of the vote mentioned the lack of maintenance of business properties.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Lack of Home Improvements	4	4	0	20
Unkept Yards	0	1	2	4
Unsightly Business	3	3	1	16
Property deteriorating from Renters	5	4	2	<u>25</u>
			TOTAL	65

#### #4 (62) Apartments

- Total vote indicated an apparent dislike for Apartments

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Apartments, Rental Property	11	10	5	58
Increase in Number of Transients	1	0	1	<u>4</u>
			TOTAL	62

#### #5 (60) Transportation

- 41% of the total vote was in reference to inadequate parking. 25% of the total vote mentioned this as the number one priority.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Inadequate Street Maintenance	0	1	1	3
Too many cars on street	5	4	2	25
Through Traffic on side streets	3	2	2	15
Narrow streets	2	1	0	<u>7</u>
			TOTAL	60

#### #6 (41) Railroad

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Poorly kept RR r.o.w.	2	0	1	7
Trains	5	1	1	18
R.R. Crossing	4	1	2	<u>16</u>
			TOTAL	41

#### #7 (36) Miscellaneous

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Influx of Hippies, delinquents, etc.	3	1	0	11
Lack of Community Spirit	1	1	1	6
Lack of Integration	0	0	1	1
Small Lots	0	2	0	4
Litter	1	0	0	3
Noise	2	1	0	8
Excessively Bright Street Lights	0	0	1	1
Utility Poles	0	1	0	<u>2</u>
			TOTAL	36

CRESCENT HILL

QUESTION #7 "Most Important Recommendations" by Priority (Weighted Score)

#1 (150) Neighborhood Beautification

- 28% of the total vote went to one item, replanting the trees.
- The remainder of the vote was rather evenly divided among the issues of upgrading the residential and business properties and clean-up and repair of the neighborhood streets and alleys.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Homeowners should keep up property	7	2	1	26
Renters should keep up property	0	4	0	8
			Subtotal	<u>34</u>
Remove Billboards	0	2	0	4
Improve Commercial Areas	2	2	3	13
Eliminate Rundown Business	0	2	0	4
Remove Headrest	2	0	0	6
			Subtotal	<u>27</u>
Clean and Repair Streets and Alleys	7	3	4	31
Improve Sidewalks in areas	0	1	0	2
			Subtotal	<u>33</u>
Enforce Litter Laws	0	3	0	6
Replant Trees	9	5	5	42
Landscape RR Row	1	2	1	8
			Subtotal	<u>56</u>
			TOTAL	150

#2 (84) Sense of Community

- 45% of the total vote in the category was related to the development of a strong community organization. Only one item in all categories (excluding misc.) had a higher weighted score than this issue.
- The remainder of the votes cast in this category were related to maintaining the character and encouraging pride in the neighborhood.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Develop strong community organization	10	3	2	38
Maintain character of neighborhood	6	2	1	23
Encourage pride in Crescent Hills	5	2	1	20
Encourage concern for each other	1	0	0	3
			TOTAL	<u>84</u>

#3 (66) Housing

- 80% of the total vote in this category was related encouraging single-family home ownership in the neighborhood.
- 45% of the total vote in this category specifically directed at keeping apartments out of the neighborhood.
- Note: As a matter of priority within this category, the provision of elderly did not appear to be particularly significant.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Keep apartment complexes out	7	4	1	30
Discourage Rental Properties	3	2	1	14
Promote single-family homes	2	1	0	8
Encourage young people to buy homes	0	0	1	1
			Subtotal	<u>53</u>
Encourage Townhouses	1	0	0	3
Provide Stable Family Environment	1	0	0	3
Home for Elderly	1	1	2	7
			Subtotal	<u>13</u>
			TOTAL	66

#4 (54) Recreation and Open Space

- The recommended improvements in this category are almost identical to the items which were mentioned by the respondents as inadequate in the preceding "Least Liked" question.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Provide more Open Areas	2	1	0	8
Street Furniture	0	1	1	3
Community Facilities for Children and Teens	4	1	1	15
Family Recreation Center	3	1	0	11
More Community Activities	2	1	2	10
Park	1	2	0	<u>7</u>
			TOTAL	54

#7 (16) Planning

- The significance of this category is that it was specifically mentioned, aside from the implication in the other categories.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Do Appropriate Planning	3	0	0	9
Stop Further Commercial	1	1	0	5
Slow Down Change	0	1	0	<u>2</u>
			TOTAL	16

#8 Miscellaneous

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Decent Movies at Theatre	1	0	1	4
Restore Kennedy and Hendon House	1	0	2	5
Rebuild from Tornado Damage	12	5	2	48
Overpass over RR	1	0	0	<u>3</u>

#5 (37) Services and Facilities

- Improved Personal Security was the significant issue in this category receiving 35% of the total vote.
- The remaining recommendations were very comparable to the issues mentioned previously as "Least Liked".
- NOTE: When Priority #4 and #5 are combined as they were in the "Least Liked" Question, their weighted score of 91 makes them the #2 Priority which is identical to their priority in the "Least Liked" Question.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Security and Safety at Home and on streets	2	2	3	13
Good Public Transit	0	0	1	1
A High School in Area	0	1	1	3
Better Trash Collection	2	0	1	7
Better Street Lighting	0	2	1	5
Improved Traffic Control	1	1	0	5
Better Leaf Collection	0	1	0	2
Post Office	0	0	1	<u>1</u>
			TOTAL	37

#6 (24) Laws

- 67% of the total vote cast in this priority was related to improved enforcement of the zoning regulations.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Total</u>
Zoning Moratorium	0	2	1	5
Ban On-Street Parking	1	0	0	3
Zoning Enforcement	3	3	1	<u>16</u>
			TOTAL	24

## APPENDIX 2

### MEMORANDUM

TO: Post Tornado Study File — OPD 790.32

FROM: Bob Cox

DATE: May 23, 1974

RE: Citizen Input — Bonnycastle

The following is a summarization of the results of the questionnaire distributed at a neighborhood meeting of the Bonnycastle Homestead Association on April 24, 1974. Approximately one hundred ten people attended the meeting and fifty-five filled out and returned the questionnaire.

The questionnaires were summarized according to key words or phrases in the answers to the individual questions. The initial summary was done by Ken Pfalzer and the categorical groupings and computations are my own. In order to determine the weighted scores and thus the priority for each item, I worked on the assumption that the most important item generally gets mentioned first and the least important last, unless otherwise noted. A value of three was assigned to each first line response, a value of two to each second line response, and a value of one to each third line response. The total weighted score was determined by adding the assigned values by item and category.

While some very general demographic comparison between the 1970 Census and the respondents is contained herein, no attempt was made to adjust the weighted scores accordingly due to insufficient sample size.

The section on recommended improvements should be viewed as recommendations from the survey respondents for the post tornado study area and not as goals, per se, for the Bonnycastle Homestead neighborhood. Further examination of these issues at the neighborhood level should be completed before any neighborhood goals statement is formalized. It was rather interesting that the number one recommendation of neighborhood beautification was one from the neighborhood to the neighborhood and not to local government as might have been expected.

Even at this general level, there are some rather obvious implications for further problem definition and action by various local agencies and community organizations. I would suggest that, to the best of our ability, we should identify the specific functional responsibilities in this regard in our final report to the Mayor and the Board of Aldermen.

## Bonnycastle Socio-Economic Comparisons

The following is a comparison of the results of Questions #2 and #3 for the questionnaire with the equivalent information from the 1970 Census.

#2 What is your age? The median age of the survey respondent was 43 years old, which compares very favorably with the census data. The age specific comparisons in the following table do not compare nearly as well. None of the respondents to our questionnaire was less than 25 years old, effectively nullifying the opinions of approximately 34.49% of the population of the area. This particular phenomena is to be expected for numerous reasons and can only be corrected by a conscious effort to solicit the input of this age group. In order to account for this, in some respect, the census data was adjusted to exclude the same age group. The results of this adjustment are also listed below. The comparison following this adjustment is much better for the 45-54 and 60-64 age groups. The only other significant comparison is found in the 60-64 age group.

<u>Age Group</u>	<u>% Respondents</u>	<u>% 1970 Census</u>	<u>% Adjusted</u>
less than 25	0	34.49	0
25-34	25.53	10.79	16.51
35-44	25.53	8.7	13.31
45-54	19.14	11.31	17.30
55-59	2.12	6.4	9.79
60-64	8.51	7.04	10.77
65-74	14.89	12.73	19.48
75+	4.25	8.54	13.07

#3 Do you rent or own your permanent home? The 1970 Census reported that 57.5% of the housing in the area was owner occupied, while 93% of the respondents to the questionnaire were homeowners. This figure is based on the number of owner occupied residential addresses in the sample. It does not include business addresses.

BONNYCASTLE

Question #5 "LIKE MOST"

	1st Line	2nd Line	3rd Line	Weighted Total
<u>Attitudes</u>				
Neighborhood Organization		1		2
Convenience	1		2	5
Nice Neighborhood		2		4
Friendliness (#1)	5			15
Neighborhood Stability	1			3
Concerned Residents	2			6
Community Pride & Spirit	1	1	1	6
Neighborliness		1		2
Young People Becoming Active in Government		1		2
Neighbors	2			6
Helpfulness	1			3

	1st Line	2nd Line	3rd Line	Weighted Total
<u>Physical Environment</u>				
Remaining Trees	1	1		5
The Park (#2)	5	3	3	24
Trees & Vegetation (#3)	6	2	1	23
Trees - In Parkway and Private Property		1		2
Wildlife			1	1
Older Homes	5	1		17
Large, Stately, Well-Kept Homes			1	1
Homes (Personal)	2			6
Attractiveness of Streets and Homes	1			3
Old Character		1	1	3
Architecture		3	1	7
Clean	1	2	1	8
Beauty	1	1	1	6
Quietness	1	2		7
Variety of Business and Stores		1		2
Proximity to Town and Park (#1)	6	6	2	32
A Park Community		1		2
Location	1	3	1	10
Length of Time in Comm.	2			6

		1st Line	2nd Line	3rd Line	Weighted Total
<u>Services/Facilities</u>					
Convenient Public Transit	(#1)	2		4	10
Quiet Streets		1			3
Close to Schools		1	1	1	6
Neighborhood Schools					
Near Shopping		1		1	4
Near Churches		1	1	2	7

		1st Line	2nd Line	3rd Line	Weighted Total
<u>Socio-Economic</u>					
Variety of People	(#2)	4		2	14
Area is an Older Established Neighborhood		1			3
The People	(#1)	8	1	2	28
Good People		2		1	7
Nice Businesses		1	1		5

Question #6 "LIKE LEAST" BY PRIORITY (WEIGHTED SCORE)

#1 (58) Services and Facilities: Lack of or Inadequate

- 58% of the vote in this category was related to inadequate trash collection, litter and garbage pick up.

	1st Line	2nd Line	3rd Line	Weighted Total
Transit Service (To Suburbs)		1		2
Lack of Police Protection	1			3
Lack of Street Lighting		1		2
Lack of Help for Disabled/Needy			1	1
City Never Cleans Streets		1		2
Garbage in Alleys	4	1		14
Litter	4	1		14
Poor (Messy) Trash Collection		2	2	6
Combined Open Sanitary/Storm Sewers	1			3
Lack of Shopping		1		2
Overhead Utility Wires	2	1	1	9
			TOTAL	58

## #2 (47) Neighborhood Beautification

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Weighted Total</u>
Some Badly Kept Property	6	4		26
Shabby Appearance			1	1
Condition of Bardstown Road	2	2		10
Unightly Comm. District	1		1	4
Run Down Garages		3		6
			TOTAL	47

## #3 (42) Transportation

- 54% of the vote in this category was reference to parking problems

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Weighted Total</u>
Too Much On-Street Parking	3	3	5	20
Unregulated On-Street Parking		1		2
Parking (2-Sides of Narrow Streets)			1	1
			Subtotal	23
Thru Traffic Problem	2	2		10
Traffic Noise		1	1	3
Narrow Streets	2			6
			Subtotal	19
			TOTAL	42

## #4 (29) Apartments

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Weighted Total</u>
Too Many Apartments	1	1	1	6
Too Many Absentee Landlords	1	2		7
New Apartments Are Not Complimenting Environment			1	1
Demolition of Homes For Apartment Construction	1	1		5
High Density/Transient Residents	2			6
Apartment Zoning	1		1	4
			TOTAL	29

#5 (42) Miscellaneous

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Weighted Total</u>
Lack of Leash-Law Enforcement	2		1	7
Disinterest in Comm. Pride			1	1
Not Having Improvement of BHA	1			3
Kids Playing Ball Behind My Property	2			6
Danger in the Park		1	1	3
Lack of Tornado Debris Removal	1			3
Poor Elementary School Administration			2	2
Hippie Influx	1			3
Availability of Hard Drugs	1			3
Zoning Regulations		1	1	3
Zoning Not Restrictive Enough Against Businesses	2			6
Frequent Changeover of Businesses	2			6
			TOTAL	<u>42</u>

Question #7 – "MOST IMPORTANT RECOMMENDATIONS BY PRIORITY (WEIGHTED SCORE)

#1 (77) Neighborhood Beautification

- 25% of the total vote in this category was related to improved street and alley cleaning and maintenance
- 24% of the vote recommended improved property maintenance
- 23% of the responses in the category were in reference to improved trash collection and litter control programs.

	1st Line	2nd Line	3rd Line	Weighted Total
Keep Bulldozers Away	1			3
Demolish Storm-Damaged Structures			1	1
Upgrade Pride in Appearance of Neighborhood		1		2
Campaign against Litter		1		3
Better Trash Collection	1	1	1	6
More Litter Baskets	1			3
Control Litter	1			3
Spring Junk Pickup - Need To Clean The Area	1			3
Clean Up, Fix Up, Paint Up Effort	1	2		7
Encourage Landlords to Keep-Up Property	2	1	1	9
Needed Home Improvement And Beautification	1			3
Clean Streets and Alleys	4	2		16
Additional Street Cleaning and Maintenance		1	2	4
Replant Trees and Shrubs	2	2	1	11
Promote Public Policies To Aid Vegetation	1			3
			TOTAL	<u>77</u>

## #2 (64) Services and Facilities

- 48% of the vote in this category was related to improved police protection

	1st Line	2nd Line	3rd Line	Weighted Total
Put Utility Lines Underground	4	3		18
Better Street/Alley Lighting	1	2	3	10
Improve Bus Service			1	1
Separate Storm and Sanitary Sewers	1		1	4
			Subtotal	<u>33</u>
More/Better Police Protection	3		5	23
More Police Protection for Park	1	1		5
Make This a Safer Community	1			3
			Subtotal	<u>31</u>
			TOTAL	<u>64</u>

### #3 (41) Transportation

- 31% of the votes in this suggested that the street network needed improvement
- 64% of the vote on this specific item recommended that the traffic needs of the area be (re)studied, including the possibility of establishing one-way pairs.
- 29% of the vote was in relation to improving the parking situation

	1st Line	2nd Line	3rd Line	Weighted Total
Off-Street Parking Be Provided For Apartments		1		2
One-side Parking on Narrow Streets		1	1	3
Slow Down Traffic			1	1
Restudy Traffic Needs (One-way on Alternate Streets)		3		9
Additional Cross Streets		1		2
Widen Streets		1		2
Reduce Traffic Noise			1	1
Stoplight- Bonnycastle & Bardstown Road	4			12
Repair Sidewalks		1		2
Add Parking Facilities	1		1	4
Better Available Parking For Businesses		1	1	3
			TOTAL	41

### #4 (36) Planning

- 80% of the vote in this category seemed to indicate a preference for single-family housing rather than multi-family housing.
- 59% of the vote was in reference to some aspect of the zoning in the area.

	1st Line	2nd Line	3rd Line	Weighted Total
Rezone The Area	1			3
Zoning to Retain Present Population Density	1	1		5
Down Zoning R-8 thru R-5 Throughout Area	3			9
More Residential Zoning			1	1
Preserve and Redevelop Residential Nature of Area		1		2
Master Plan (Architectural) For Remodeling Area			1	1
Improve Land-Use Plan			1	1
Maintain Existing Structures		1		2
Get More People Interested in Zoning		1		2
Increase % of Resident Owned Homes		1	1	3
Prevent Sacrificing Homes For More Apartments	1			3
Keep Out New Apartment Complexes	1		1	4
			TOTAL	36

#5 (16) Bardstown Road

- 81% of the vote in this category was in reference to upgrading the area.

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Weighted Total</u>
Rehab Bardstown Road			1	1
Arrange Low-Cost Loans To Rehab Businesses		1		2
Improve Bardstown Road Commercial/ Shopping Area	1	1		5
Make New Renting Businesses Subject To Screening	1	1		5
				<hr/>
			TOTAL	16

#6 (6) Recreation & Open Space

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Weighted Total</u>
Vest-Pocket Mini-Parks			2	2
Neighborhood Community Center			1	1
Swimming Pool For Cherokee Park	1			3
				<hr/>
			TOTAL	6

#7 (19) Miscellaneous

	<u>1st Line</u>	<u>2nd Line</u>	<u>3rd Line</u>	<u>Weighted Total</u>
More Concern and Respect For Neighbor's Feelings	2			6
Enforce Leash Law	1		2	5
Work Together as BHA Has Done	1			3
Improve BHA	1			3
Better Disaster Warning System		1		2
				<hr/>
			TOTAL	19

## APPENDIX 3

### Outline for the proposed R-5A District

#### USES PERMITTED

R-1  
Grouphouses  
Dwelling, two family  
Multiple-family dwellings  
Row Houses

#### MINIMUM YARDS

Front	25'
Side	10'
min.	5'
Street side	25'
Rear	25'

#### MAXIMUM BUILDING HEIGHT

2 1/2 stories not to exceed 35'

#### MINIMUM LOT AREA PER DWELLING UNIT

3,625 square feet, provided, however, that when a lot has less area than herein required and was recorded prior to the adoption of these regulations, said lot may be occupied by one dwelling unit.

#### MINIMUM LOT SIZE

Area:	6,000 square feet
Width:	50 feet

#### Other Requirements

(a) Maximum Floor Area Ratio 0.28

## APPENDIX 4

### STREET TREE AND SIDEWALK DAMAGE REPORT AND RECOMMENDATIONS FOR REHABILITATION OF THE CRESCENT HILL AND DEER PARK — BONNYCASTLE NEIGHBORHOODS.

The major street tree damage was located in the Eastern Parkway vicinity northeast of Bardstown Road and the Grinstead Drive vicinity and adjacent streets. Along Eastern Parkway the most common type of tree was the oak and the scarlet oak was probably the most dominant. In the Grinstead Drive area the most dominant tree was the silver maple, although there were some sycamores along Grinstead Drive.

In all the other areas of this report, the most dominant tree was the silver maple. Fifty years and more ago, the silver maple was widely planted as an ornamental tree; now with the recurrence of high wind storms and with knowledge of the other more recently introduced trees, the weak-wooded silver maples are definitely going out of fashion. Also the silver maple is susceptible to various diseases. The silver maple tree where planted along the narrow streets created a canopy of trees or visual tunnel-like effect and also a visual barrier between the street and large houses. To maintain this same character along the streets and, since many of the street trees in the tornado damaged areas are still standing, it is recommended that sugar maples be replanted in place of the silver maples. The sugar maple, although not quite as fast growing as the silver maple, has many of the same growth patterns as the silver maple and has very little limb breakage during high winds. It is also a more handsome tree with beautiful fall color.

Along Eastern Parkway where the oak was the dominant tree, it is recommended that the fallen oak trees be replaced with the red oak which is the most rapidly growing of the oaks and easily transplanted. Also, on the opposite side of Cherokee Park along Cherokee Road many of the fallen trees were oak and it is recommended that red oak be replanted.

The spacing between newly planted trees should be between 40 and 50 feet depending upon existing site conditions along each individual street. A desirable minimum width between sidewalk and street curb is four feet although many of fallen and existing trees are surviving in a space of two feet or less.

The major sidewalk damage was where the trees were uprooted. These walks should be repaired but any replacement of walks should be coordinated with any proposed street widening.

Many of the streets in the tornado damaged areas do not have sidewalks and any future planning should consider providing walks. The density is generally five units per acre and walks should be provided for pedestrian circulation in areas of this density. It will be well to point out that in many areas, due to narrow streets and steep banks, it will not be feasible or practical to have sidewalks. An example of this problem is the Cochran Hill area which has very narrow streets, steep grades and steep banks from the edge of street pavements. As previously stated, any sidewalk program should be coordinated with any proposed street widening or other street improvement program.

In many of the areas damaged by the tornado there were no existing street trees or front yard trees. It is proposed that these areas be planted in trees in conjunction with any sidewalk improvement program. In those areas where sidewalks are not feasible, it is suggested that any planting program be in the front yards of each individual owner. It is recommended that the sugar maple be planted in these areas since the maple is the dominant tree.

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### Service Center Staffs

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