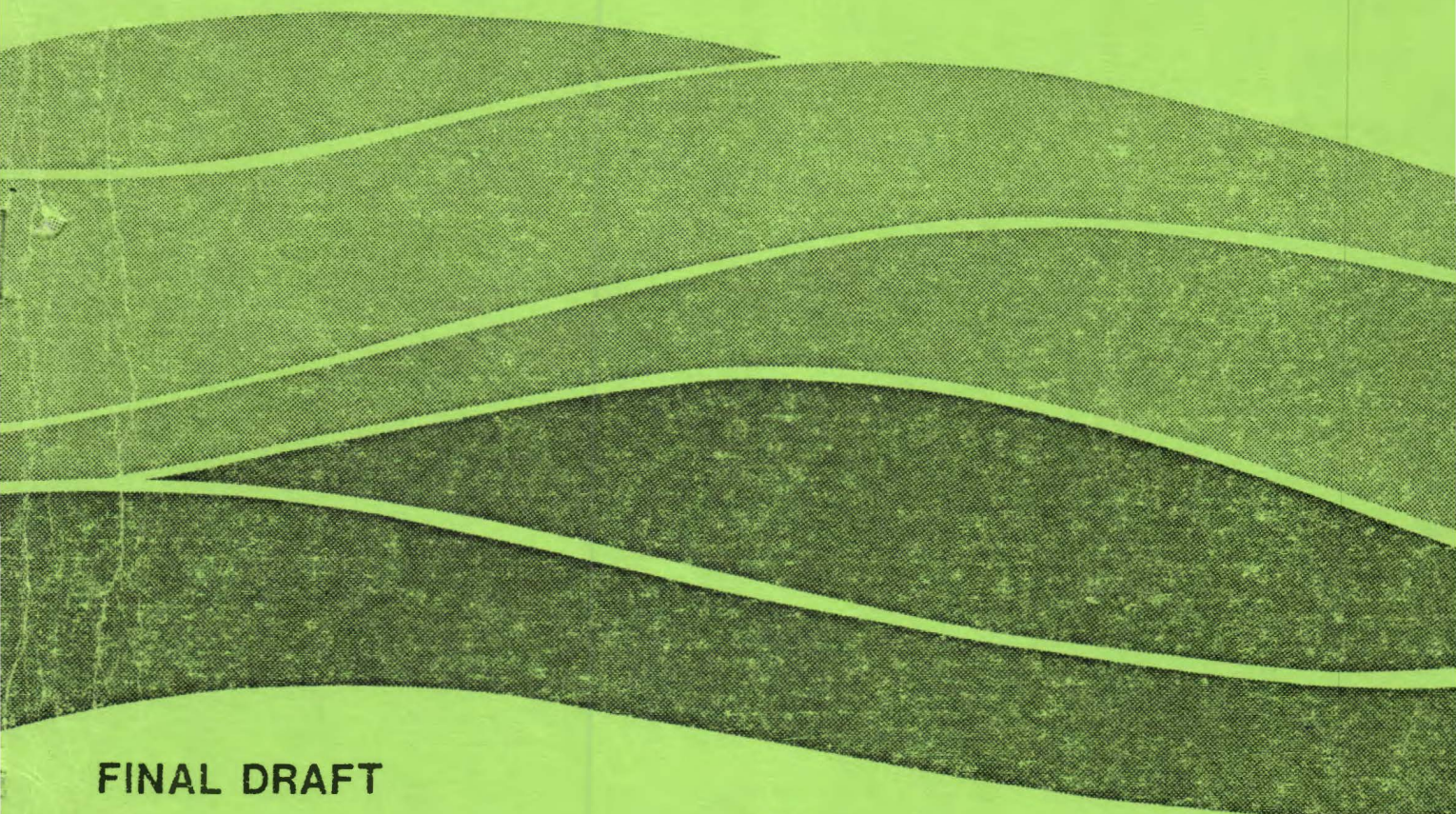


Chadwick

12/77



FINAL DRAFT

boyds

MASTER PLAN



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue • Silver Spring, Maryland 20907

(301) 565-7408

December 2, 1977

The Honorable John Menke, President
Montgomery County Council
County Office Building
Rockville, Maryland 20850

Dear Mr. Menke:

In accordance with Montgomery County Council Ordinance 7-38 the Montgomery County Planning Board hereby transmits to the Montgomery County Council, sitting as the District Council, the final draft of the Boyds Master Plan. The staff draft plan was developed by the staff, with the aid of the Boyds Plan Advisory Committee. A Montgomery County Planning Board public hearing was held on June 28, 1977. As a result of the public hearing testimony and several worksessions with the Planning Board, the final draft of the Boyds Master Plan has been produced.

The most pressing issue in the Boyds community is the possible development of a rock quarry and crushing operation in the immediate vicinity. In the absence of a formal application for the necessary zoning and/or permits for a quarry use, the Plan cannot directly assess the impacts of a quarry on Boyds or the surrounding area. However, should a permit for a quarry operation in Boyds be approved, it is the position of the Planning Board that such an operation will have a significant enough impact that re-evaluation of the Boyds Master Plan, and several other area master plans, would be in order.

Another important issue concerns the existing I-1-zoned property at the northwest intersection of Bucklodge Road and the Baltimore and Ohio Railroad. The tract totals 89 acres, lying astride the boundary of the planning area. A portion of the tract has been zoned I-1 since expansion of the Regional District in 1957. The balance of the tract was rezoned by local map amendment in 1963. Although presently in disrepair, there is a rail siding bordering the property. It is this fact that led to the continuance of the I-1 zoning at the time of the Rural zone Sectional Map Amendment in 1974. While the Planning Board staff

John Menke
page 2
December 2, 1977

has recommended continuance of the existing zoning, the Planning Board believes that due to the unawareness of many people that this zoning existed and due to other over-riding issues, such as the quarry, the status of the I-1 zoning was not sufficiently addressed at the June 28, 1977 public hearing. This issue should be the subject of further scrutiny by the Council during their deliberations.

The recommended land use pattern for the Boyds Planning Area that overlaps the Clarksburg Master Plan area, aside from the existing Oakridge subdivision, is recommended for two acre residential development. This is at variance with the one acre development recommended in the Clarksburg plan. However, the staff and the Planning Board believe that two acre development is more appropriate for this area, and this recommendation has been supported at the public hearing.

The development of Lake Site 3 is included as a major component of the Boyds Master Plan. Since the study which will generate recommendations for development of the lake and its associated recreational facilities is still underway, specific recommendations for this area will be forthcoming as the Soil Conservation Service PL-566 study proceeds.

Finally, the plan recommends a limited water and sewer service system for the Boyds community. Details for this phase of the study were developed by the County Office of Community Development as a pilot project for providing sanitation services to rural communities.

Sincerely,


Royce Hanson
Chairman

RH:PB:DM:hb

FINAL DRAFT
BOYDS MASTER PLAN

An Amendment to the Master Plan, Clarksburg and Vicinity, Montgomery County, Maryland, being also a proposed amendment to the General Plan for the Physical Development of the Maryland-Washington Regional District in Montgomery and Prince George's Counties, Maryland

The Maryland-National Capital Park and Planning Commission
Montgomery County Planning Board
8787 Georgia Avenue
Silver Spring, Maryland 20907
November, 1977

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THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

The Maryland-National Capital Park and Planning Commission is a bi-county agency created by the General Assembly of Maryland in 1927. The Commission's geographic authority extends to the great majority of Montgomery and Prince George's Counties: the Maryland-Washington Regional District (M-NCPPC planning jurisdiction) comprises 1001 square miles, while the Metropolitan District (parks) comprises 919 square miles, in the two counties.

The Commission has three major functions:

- (1) the preparation, adoption, and from time to time amendment or extension of the General Plan for the physical development of the Maryland-Washington Regional District;
- (2) the acquisition, development, operation, and maintenance of a public park system; and
- (3) in Prince George's County only, the operation of the entire county public recreation program.

The Commission operates in each county through a Planning Board appointed by and responsible to the county government. All local plans, recommendations on zoning amendments, administration of subdivision regulations, and general administration of parks are responsibilities of the Planning Boards.

ABSTRACT

TITLE: A Master Plan for the Boyds Community,
Montgomery County, Maryland

AUTHOR: The Maryland-National Capital Park and Planning
Commission

SUBJECT: Land Use, Zoning, Transportation, and Public
Facility Plans for the Boyds Community

DATE: November, 1977

PLANNING AGENCY: The Maryland-National Capital Park
and Planning Commission

SOURCE OF COPIES: The Maryland-National Capital Park
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8787 Georgia Avenue, Silver Spring,
Maryland, 20907 and
14741 Governor Oden Bowie Drive,
Upper Marlboro, Maryland, 20870

SERIES NUMBER: 3901782506

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ABSTRACT: This document contains maps and supporting text of a Master Plan for the Boyds Community, Montgomery County, Maryland. The master plan amends the Master Plan, Clarksburg and Vicinity, adopted by The Maryland-National Capital Park and Planning Commission in September 1968, and the General Plan for the the Maryland-Washington Regional District in Montgomery and Prince George's Counties, Maryland. The Boyds planning area encompasses approximately 3,085 acres in west central Montgomery County and is presently characterized by rolling farmland and isolated single-family residential development surrounding the rural community of Boyds.

The Boyds plan proposes to set forth a method for permitting an orderly and well-balanced plan for the community by enhancing the livability of the area through the expansion of water, sewer, transportation, parks, and other public facilities at a scale which is sensitive to the community and not simply an attempt to adapt urban concepts to rural scale.

The plan proposes to expand the residential area of the community in order to achieve an acceptable cost level for water and sewer facilities. Highway improvements are proposed in order to improve traffic safety and circulation. Expansion of the existing commercial center and improvements to the commuter rail station are intended to strengthen the community center. Rural uses and rural estate development are proposed for areas surrounding the Boyds community in order to help maintain the character of the community.

MASTER PLAN FOR THE BOYDS COMMUNITY

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The Boyds Advisory Committee, as such, does not express general approval or disapproval of the master plan. Individual members give the Montgomery County Planning Board their views on the needs and problems of the particular groups and areas they represent. The Board takes these views into consideration during its deliberations on the plan. The fact that the names of members of the Advisory Committee are listed above does not constitute endorsement.

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Chapter I

INTRODUCTION

Boyd's, Maryland, is a rural community in the northern section of Montgomery County. A small unincorporated town, it is located approximately 30 miles north of Silver Spring, bounded on the east by the Germantown Planning Area. The Boyd's study area overlaps the western side of the Clarksburg Master Planning Area. Consisting of approximately 3,085 acres, the northern boundary line extends approximately one mile north of Black Hills Road, along Maryland Route 121 and across Slidell and Barnesville Roads (see Figure 1).

Somewhat isolated from the urban metropolis of "down county" and the District of Columbia, its residents highly value its serenity and seek to protect it from urban encroachment (see Figure 2).

The Boyd's community has many characteristics which typify smaller communities and, hopefully, may serve as a prototype for a meaningful developmental approach for other rural communities.

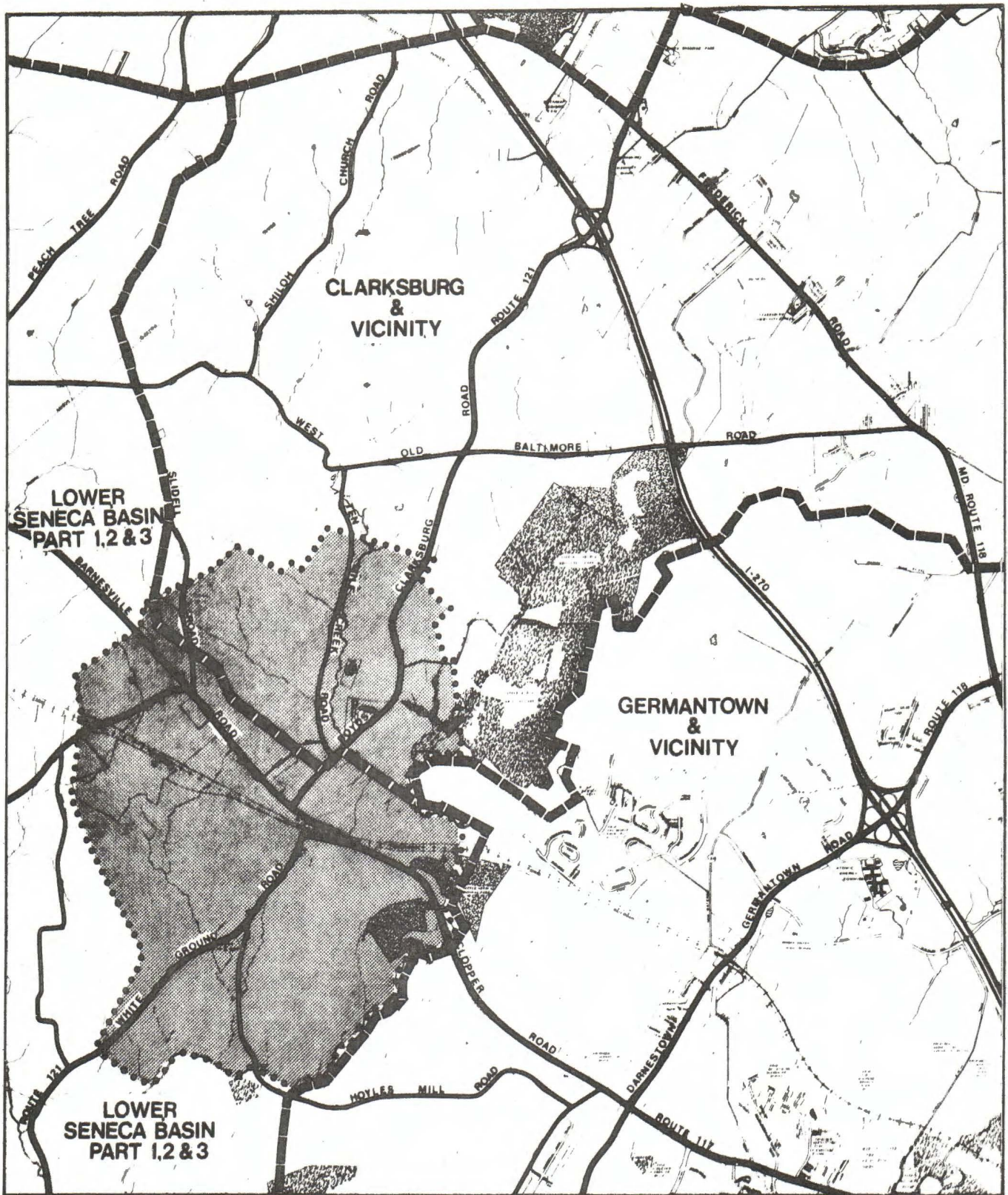
In developing a Master Plan for the Boyd's area, it is essential that human and environmental considerations be given as much emphasis as are those of technical and sophisticated analyses.

The citizens of Boyd's have specifically requested a Master Plan for their community, indicating a recognized need for an orderly and well-balanced growth policy which will enhance the livability of the area rather than permitting haphazard development which could destroy its charm and rural atmosphere. The primary thrust of this request was to prepare a plan which would allow for an expansion of water and sewerage systems in the area. There is concern regarding change within the community. And yet, if the community is to survive, it must combine the amenities of rural life with the tangible, practical assets and facilities which our society needs and demands. It is a difficult balance to maintain, but one which must be achieved if the community is to retain its vitality.

It is the intent of this plan to address those needs which are critical to rural areas in a manner which is sensitive to the community and not simply an attempt to adapt urban concepts to a rural scale.

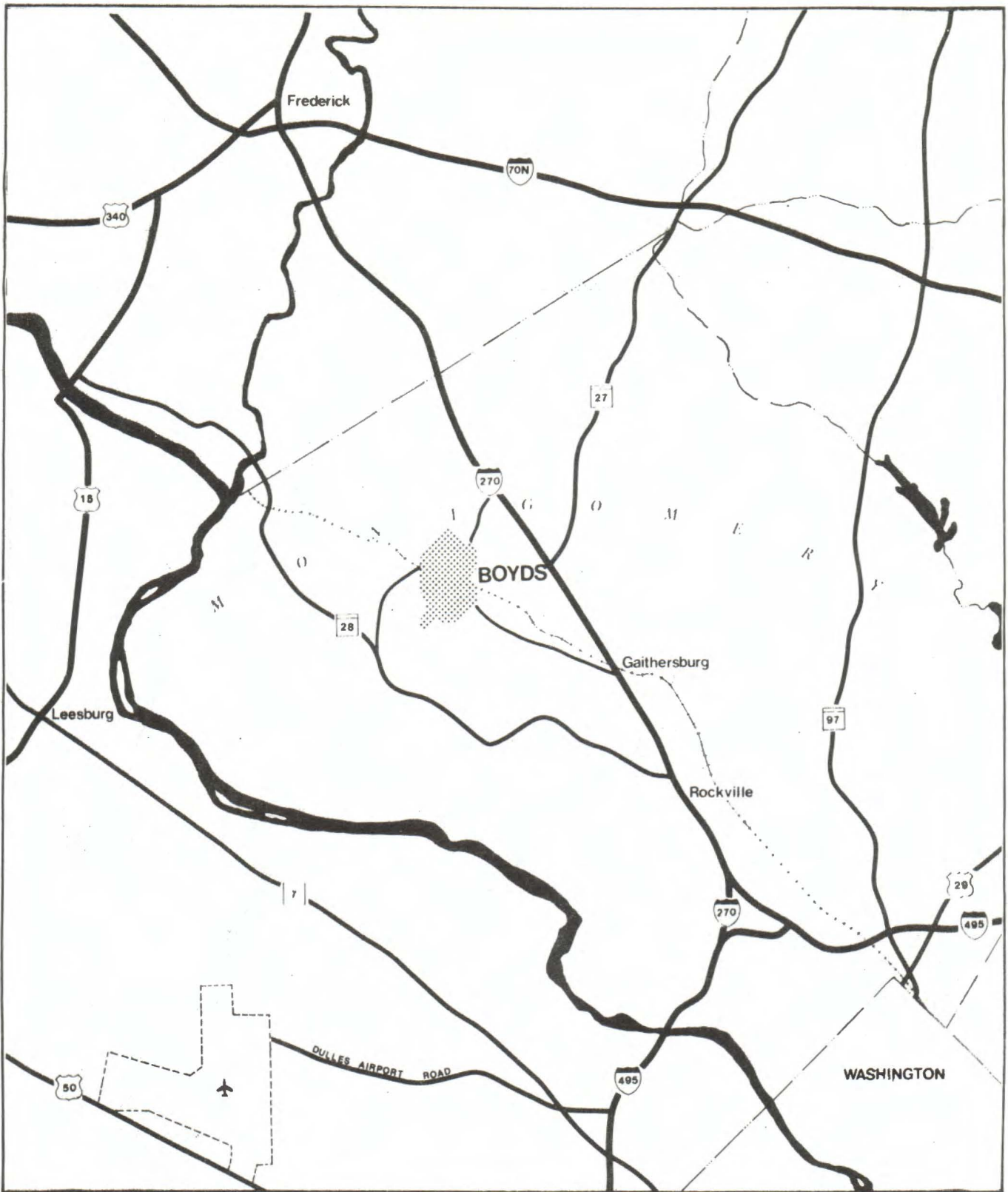
To a great extent, the development of a Master Plan for this area has been the result of the concern of both community residents and county officials alike, as they seek solutions to the problems which face many rural sections of Montgomery County--the wedge areas which are one of the basic elements of the Wedges and Corridors Plan.

There are several major problems which appear to be indigenous to rural communities. They are often faced with inadequate public facilities, particularly in the areas of water and sewage disposal, inefficient health systems delivery, inappropriate commercial centers, and a lack of adequate transportation resources.



<p>..... Boyds Master Plan Boundary</p> <p>----- Planning Area Boundary</p>	
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<p>BOYDS MASTER PLAN</p>	<p>PLAN SHOWING RELATIONSHIP WITH GERMANTOWN & CLARKSBURG</p>	<p>1 FIGURE</p>
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BOYDS MASTER PLAN

VICINITY MAP

2
FIGURE

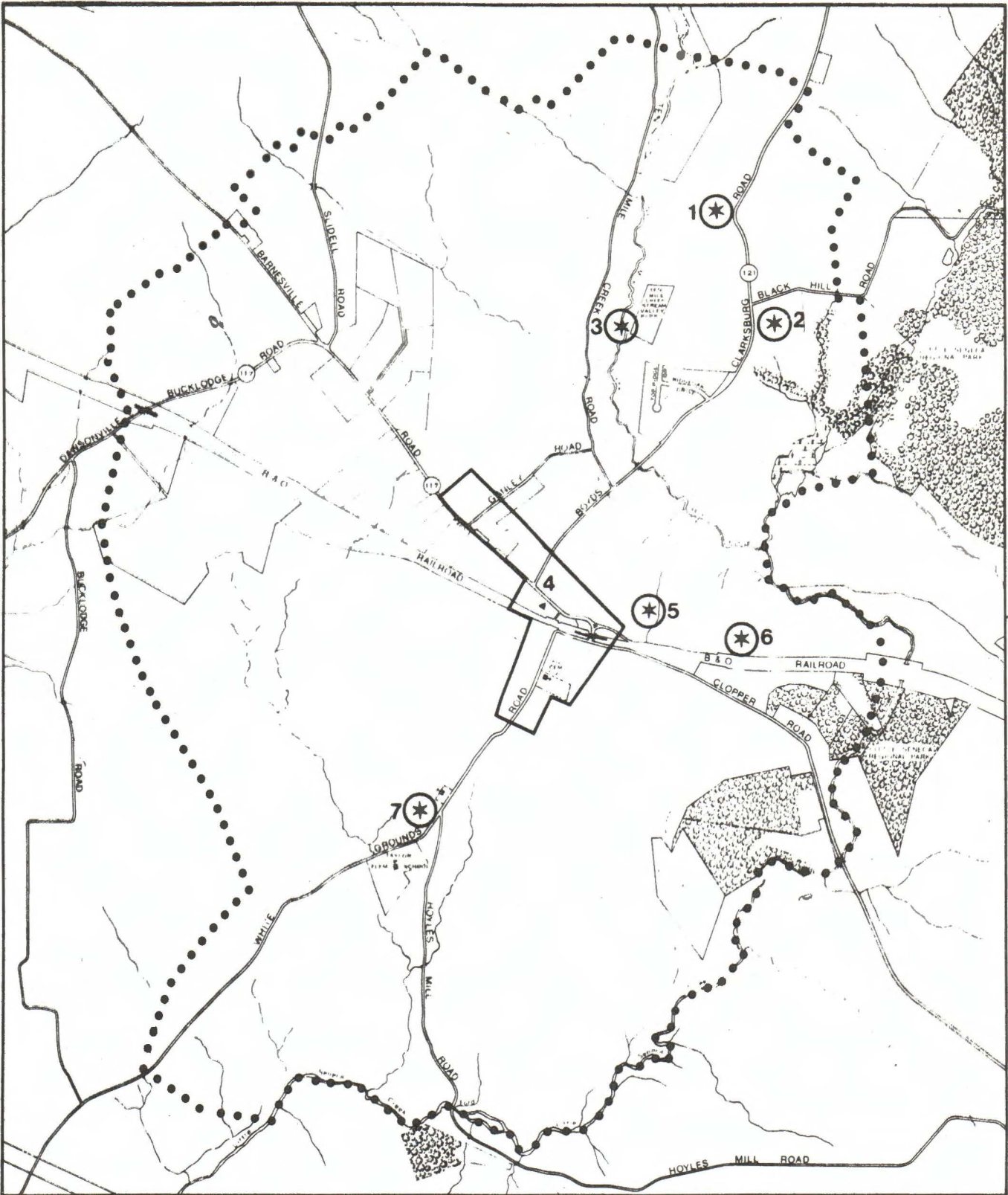


A brief historical sketch of Boyds will provide background information and insight into the area. The town was created in 1873 with the completion of the Metropolitan Branch of the Baltimore and Ohio Railroad. It was named after James A. Boyd, who was a private contractor of Scottish origin. While building the railroad, Boyd purchased land in the area for the provision of workers' housing. Later, adding to his land holdings, Boyd settled in the area and developed the Boyds Farm, known as the "Bonnie Brae." The railroad honored Boyd with the building of a handsome brick train station at this stop which they named after him. In 1873, the first mercantile business was also opened in the community by James E. Williams and Mahlon Lewis (see Figure 3).

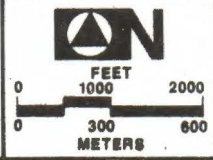
Black people have played an important role in the development of Boyds, some arriving as slaves of migrating settlers. Others came to the area to participate in the construction of the railroad, many coming down from the Barnesville and Poolesville areas.

Prior to the completion of the railroad, residents in Boyds worshipped in a one-room school house which still stands across from the Edward U. Taylor Elementary School.

The first church to be organized was the United Presbyterian, perhaps influenced by Colonel Boyd's Scottish Presbyterianism. In the early 1900's, the community was the center of social and economic activities for the surrounding area. It was a pretty village with a handsome brick train station and large gracious homes, the center of a summer colony of visitors who arrived by train and stayed at farm houses which served as summer boarding houses. The doubling of the train tracks had a detrimental effect on the town, destroying some of its beauty and draining its economic vitality. However, much of the historic flavor of the town may still be found in the older, original town center.



- | | |
|----------------------------|--------------------------------------|
| 1 Burdette Hotel | 5 Boyds (Capt. James) Farm |
| 2 Burdette (William) House | 6 Totten House |
| 3 Ten Mile Creek Road | 7 Saint Mark's Church & Boyds School |
| 4 Boyds Historic District | |



BOYDS MASTER PLAN

HISTORIC SITES

3
FIGURE

Chapter 2

SUMMARY OF THE PLAN

The total population and developed base of Boyds is small and, therefore, the need for public facilities does not develop in a continuous pattern. Change will come in definable increments to Boyds--a park is developed, new commercial establishments are added, a lake is constructed. These actions affect the gradual residential growth of Boyds and serve as the generators of other public projects and governmental activity.

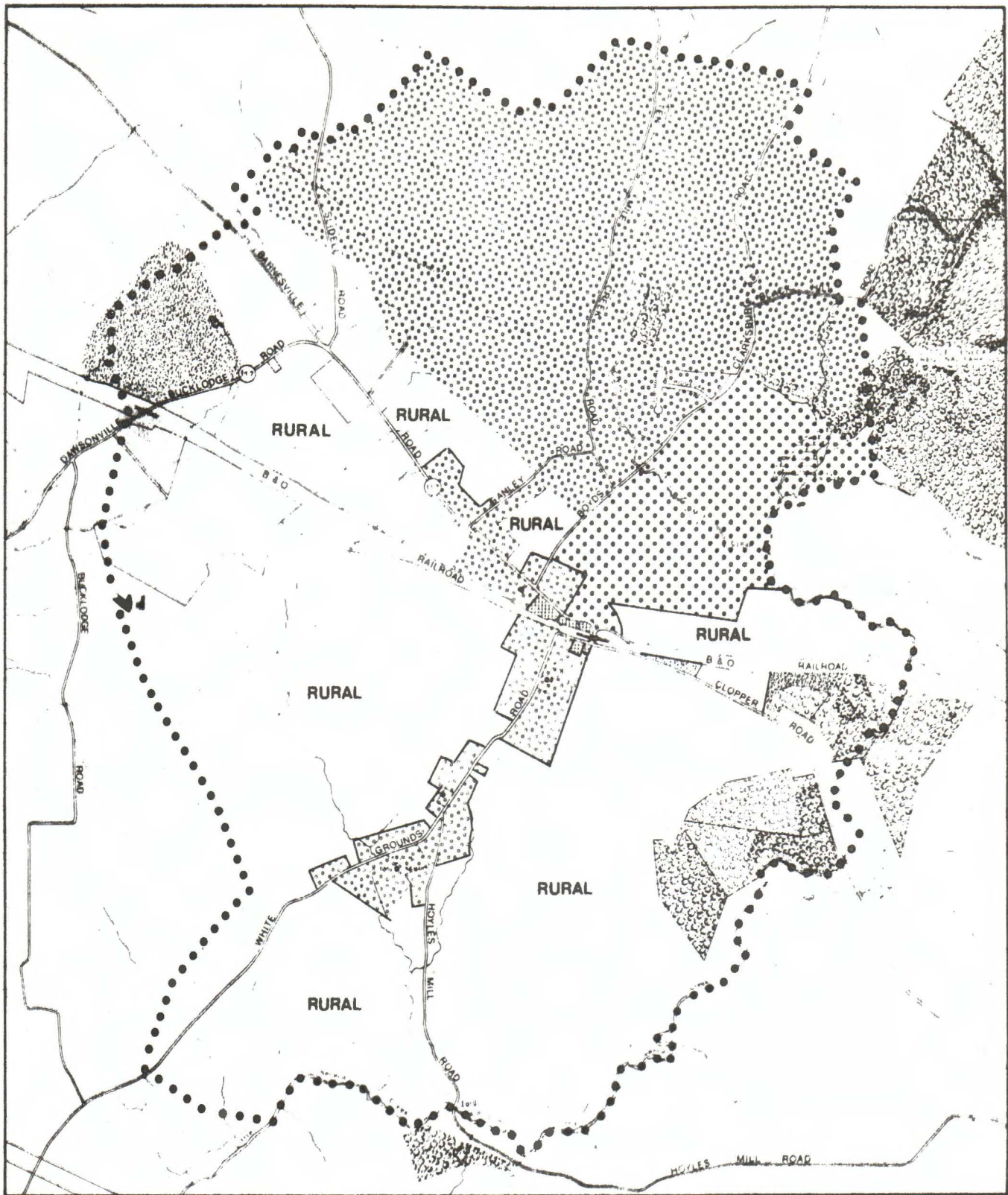
Planning issues have been identified and a plan developed after numerous meetings with residents of the area and after considerable citizen involvement. It is the aim of the plan to address the balance of pressure from regional activities and the retention of local community integrity (see Figures 4 & 6).

Major Planning Issues:

- . The existence of a pressing health problem within the community, the result of inadequate water and sewer service.
- . The development of a 458-acre lake to be used as an emergency water supply reservoir with the possibility of active and/or passive recreational development.
- . The provision of some additional housing and commercial growth.
- . Improvement of road circulation.
- . Provision of a public park which would provide a diversity of outdoor recreational facilities.
- . The presence of a natural mineral resource, a large diabase rock deposit. If developed as a quarry, the extraction of the stone would have to be undertaken in a manner which would not have a significant negative impact upon the town and the surrounding communities. Since any decision on whether a quarrying operation will be permitted in this area is dependent upon considerable review by numerous other agencies, the issue of a quarry will be addressed in detail and separately from other issues of this plan (see Chapter 5). The impact of a possible quarry would be significant and, therefore, should be evaluated carefully.

Recommendations made in the plan were designed to fulfill the following four basic objectives:

1. The retention of a rural, residential community composed primarily of single-family dwellings at varying densities with a proposal for orderly, limited growth.
2. The establishment of a master plan which would be in harmony with the present Germantown and Clarksburg Master Plans.



RURAL Rural Zone	C-1 Local Commercial
R-200 One Family Detached, Large Lot	I-1 Light Industrial
T-S Town Center	

0 FEET 1000 2000
0 300 METERS 600

BOYDS MASTER PLAN

EXISTING ZONING

4
FIGURE

3. Development and maintenance of public services to ensure the highest possible level of service attainable within fiscal constraints, at each stage of the community's development.
4. The possibility of a quarrying operation in conjunction with a stone crushing process is considered by this plan, but no recommendation is made beyond that of allowing no pre-emptive uses for the land containing the deposit. The impact of a quarry/crushing operation would be so significant that the objectives of this plan should be reconsidered and amendments made to it if it is determined that such a use is necessary or desirable from the viewpoint of the County as a whole. Further, amendments to other master plans should be considered to account for the impact of such a use on transportation routes and adjacent communities.

LAND USE

The majority of the developed land in Boyds is in residential use, with large parcels of land either vacant or in agricultural use. The town center consists of a few local commercial establishments, with the B & O Railroad passing through the center of the town. Along the railroad in the eastern section of the town are two small industrial uses. There is also a commuter stop on the railroad, created in the center of town, at present somewhat under-utilized. Educational facilities consist solely of an elementary school, also under-utilized. The major problem in the town is that of inadequate sewerage service. This fact is probably the major deterrent to the return of young families who grew up in the area.

In addition to some new homes in the area, there are also some older homes which would benefit from conservative rehabilitation. Few changes are envisioned to the existing land use pattern; changes which are planned are primarily those which will strengthen the Town of Boyds, best characterized as "a home in the country" (see Figure 5).

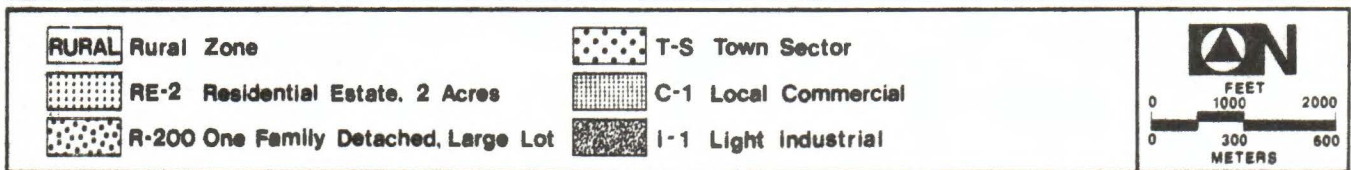
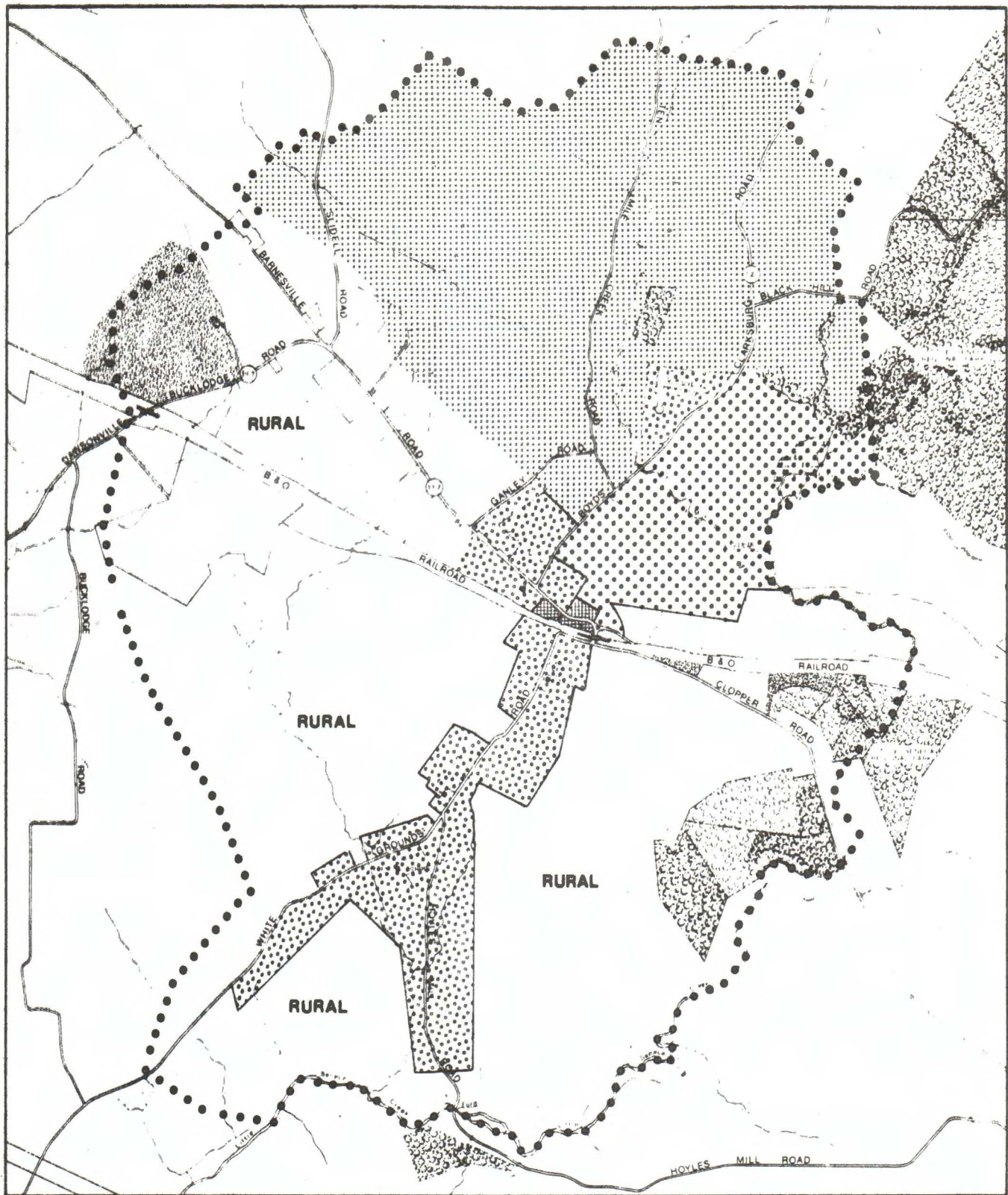
Residential Development

The development of any new homes along either White Grounds or Hoyles Mill Roads is directly dependent upon finding a solution to the sewage problems in the area.

The most feasible solution lies in the development of a community system, rather than leaving the solution to the individual homeowner, since the dense diabase formation in this area makes individual septic systems difficult and is the source of the existing problem of septic failures.

Three reasons, in particular, make a community sewerage system the most advantageous from the point of view of community improvement.

1. The establishment of a community sewerage system in Boyds will enable individual homeowners to qualify for conventional loans, Federally funded and insured loans and County-funded home-improvement loans, thus providing the opportunity to arrest deterioration of the housing stock in these areas.



BOYDS MASTER PLAN	PROPOSED ZONING	5 FIGURE	
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2. Provision of a public system will also provide the framework for modest future growth within the Boyds community, offering the children of existing residents the choice of remaining in the area when they reach adulthood and allowing some other families the opportunity to live in Boyds.
3. This approach to the sewerage problems of Boyds will create the potential for increasing population in the southern end of Boyds, strengthening the base of the community and reinforcing the need to maintain and upgrade the currently under-utilized Taylor Elementary School.

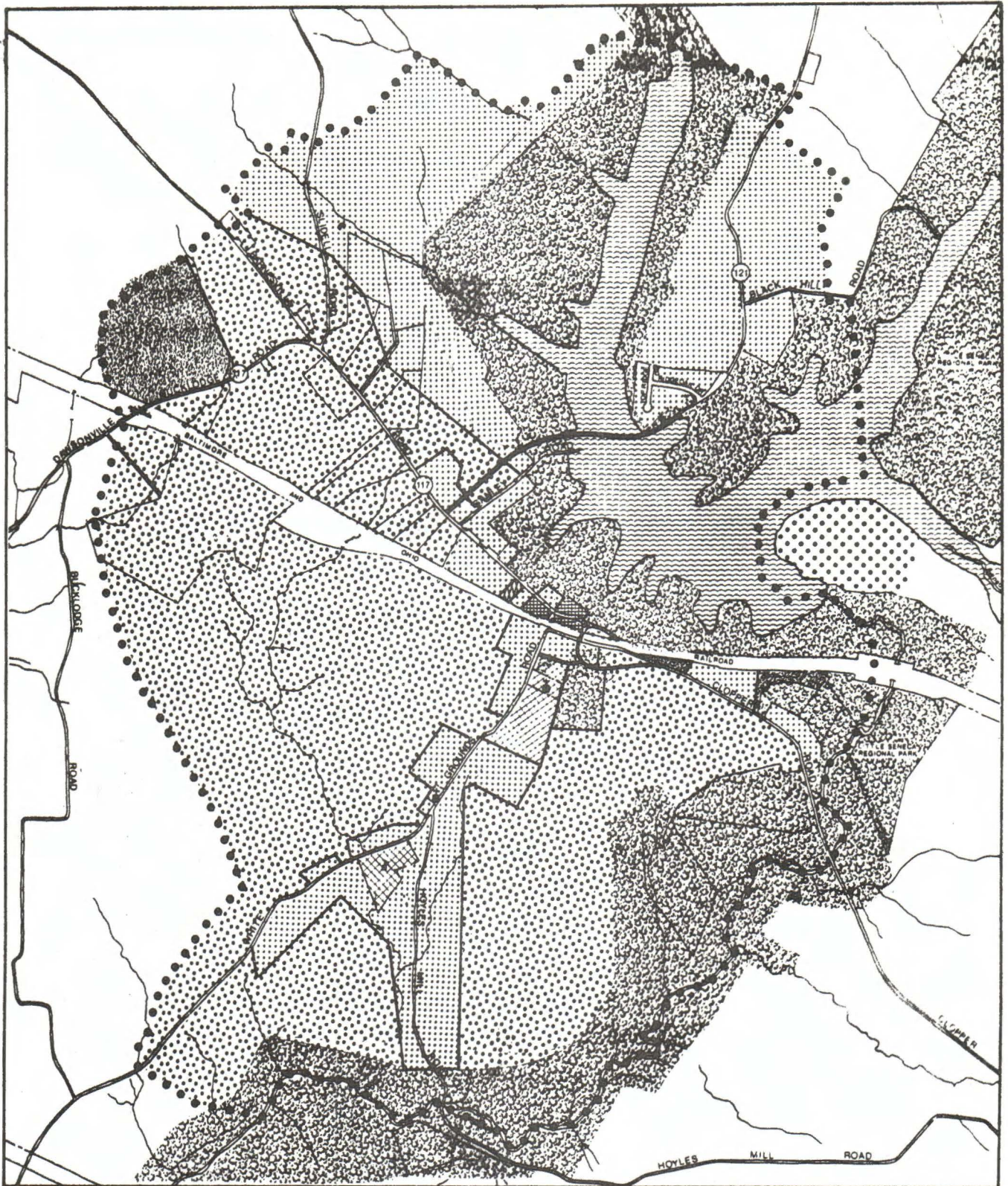
Therefore, it is recommended that the existing residential zoning (R-200) along White Grounds and Hoyles Mill Roads be retained. Retention of the existing development pattern would give priority for service to existing owners of undeveloped R-200 land. This approach would accommodate the equivalent of 29 existing and 35-40 new homes on scattered sites within this area. This potential to serve a total of 65-70 homes or lots would fulfill the level of demand necessary to make the Sewerage Plan operable according to the Office of Community Development of Montgomery County.

A second stage of development could serve the Ganley Road area at some future time, if a second stage of the community sewerage system is constructed.

It is recommended that all undeveloped parcels in the northwest section of the planning area, currently zoned R-200, be changed to RE-2. The rezoning of this area would establish a compatible land use pattern where the Boyds and Clarksburg Master Plan boundaries overlap and where the predominant residential pattern is two-acre development (see Figure 7).

A portion of the Boyds planning area is covered by Town Sector zoning, this being part of the land originally held by the Germantown Investment Company and now a part of the Churchill development in Germantown. When Town Sector zoning was approved, a site development plan for the entire tract was submitted as a part of the zoning and the site plan can only be changed with favorable votes of the Planning Board and District Council. At present, all Town Sector-zoned land west of Little Seneca Creek is planned for open space. Should Lake Site 3 be developed, virtually all of this land will be acquired for the lake and adjacent parkland.

At the northwest intersection of Bucklodge Road and the Baltimore and Ohio Railroad (Chessie System), there is an 89-acre tract of land zoned Light Industrial (I-1). Uses permitted in this zone include warehousing electronics assembly, lumberyards, printing plants, and the like (refer to section 59-C-5 of the Montgomery County Zoning Ordinance). A portion of this tract was zoned prior to the 1957 expansion of the regional district, and the balance was rezoned I-1 by local map amendment in May, 1963. The land is currently being farmed. The Planning Board staff recommends retention of the I-1 zoning, but since we believe that this issue was not adequately addressed at the public hearing on the staff draft, further comment on the retention of the I-1 zoning is desirable at the public hearing on the final draft plan.



BOYDS MASTER PLAN	PROPOSED LAND USE PLAN	7	FIGURE
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Commercial Development

The commercial area of Boyds consists of very few services, a characteristic of many rural communities. These services, however, limited, are located in the center of the community on Barnesville Road (Maryland Route 117) between the intersection of Clarksburg Road and the Baltimore and Ohio Railroad underpass. The few commercial facilities in this area consist of a General Store, a farm implement and supply store, and a paint store, with a cement company and a lumber operation located nearby. Citizens of the Boyds area have indicated that some additional facilities which would provide convenience goods and services at the local scale would be appropriate.

The preliminary draft of the Boyds master plan indicated two possible choices for future expansion of the commercial facilities. The first location, Site I, was located on the north side of Barnesville Road across the street from the existing commercial development. The other location, Site II, was shown next to the post office on the south side of Barnesville Road.

Based on testimony given at the public hearing on the preliminary draft (June 28, 1977) and subsequent worksessions with the Planning Board, Site I is recommended for future commercial expansion. This site has support by the Boyds Civic Association. Locating future commercial expansion at this location will allow the use of the proposed commuter rail parking lot to be used jointly with the commercial center. Grouping all of the commercial facilities in close proximity will tend to strengthen and revitalize the whole commercial center of Boyds. Finally, the Site I location provides the opportunity to integrate the rail stop and commercial center with the recreational facilities that may be provided in conjunction with the development of Lake Site 3 and the regional park.

Recreational Facilities Development

Development of a Local Park

The development of a local park in Boyds has already received approval in the County Capital Improvements Program. It is planned that the park will be a 10-acre facility designed to ultimately serve approximately 2,000 people in the Lower Seneca Basin Planning Area.

The Boyds Master Plan recommends that the park be located near the center of town at the intersection of Barnesville Road, Clopper Road and White Grounds Road. The park will require an access road and parking. The development of this local park will serve as the primary catalyst to set in motion other necessary improvements within the community. It will create the need for a realignment in the roadway system at Clopper Road near the Baltimore and Ohio Railroad underpass to provide better access to the new park as well as the needed recreation resources within the park itself (see Figure 8).

Park construction will accomplish two things--establish a community-oriented park and implement the first stage of the new circulation plan for the community.

Taylor Elementary School

The Taylor Elementary School has a capacity for 225 pupils, an enrollment which has not been currently reached. The current Capital Improvements Program has appropriated four hundred and seventy-four thousand dollars (\$474,000.00) for renovations to the existing facility. A portion of these funds have been earmarked for the construction of a physical education facility. The Boyds Master Plan endorses these improvements and anticipates that the implementation of these programmed improvements will meet the additional recreational needs which can be expected when there is an increase in school-age children generated by new homes on White Grounds and Hoyles Mills Roads.

SENECA CREEK WATERSHED

Development of a Regional Park and Lake Site No. 3

The United States Soil Conservation Service (SCS), in cooperation with the Montgomery County Council and The Maryland-National Capital Park and Planning Commission, have become joint sponsors of a Watershed Study along Seneca Creek in Montgomery County.

The Seneca Creek Watershed is located in the western part of Montgomery County, Maryland, and drains an area of 82,479 acres which represents approximately 27.5 percent of the total County area. The primary problem in the watershed is the siltation of the stream channel and ultimately the Potomac River channel. Minor flooding in the watershed has also damaged roads, bridges, and culverts, but flooding is not a major problem at this time.

In 1971, a Preliminary Investigation Report was issued which considered conservation land treatment measures in both urban and agricultural areas of the Seneca Watershed, seven impoundment-type structures, sediment control basins, debris basins and stormwater management proposals. Cost of the project provides for administration of contracts, obtaining land rights and development of recreational facilities. The Maryland Fish and Wildlife Administration would manage fisheries within impoundments identified for such uses.

The multiple-purpose flood prevention and recreation structures would be installed with Federal financial assistance. A preliminary report has identified seven potential floodwater retarding structure sites. One of the sites that appears to have a great deal of potential is Site No. 3 in Boyds. The report states that Lake Site No. 3 would be located on the Little Seneca Creek below the junction of Ten Mile Creek and Cabin Branch, above the Baltimore and Ohio Railroad tracks (see Map 7). It is one of the larger of the proposed sites and has excellent potential for recreational development. The impoundment includes 6,575 acre feet of flood retarding storage, 2,210 acre feet of sediment storage and 8,640 acre feet of beneficial storage for recreation. At normal recreational pool level, a 452 acre lake will be formed.

The development of a lake-oriented regional park facility near the center of town would create a significant amenity for the Town of Boyds as well as for the entire County while contributing to the overall development of the Little Seneca Regional Park.

Recreational development for this park as proposed may include the following facilities: camping area, cabin rental area, group picnic area, nature center, equestrian center, golf course, trail camping area, visitor center, general picnic area, hiker-biker paths and bridle trails. Final development plans for the regional park will be subject to future citizen involvement and comment.

The community of Boyds and the Ten Mile Creek Watershed Association have endorsed the development of Lake site No. 3 and the Regional Park.

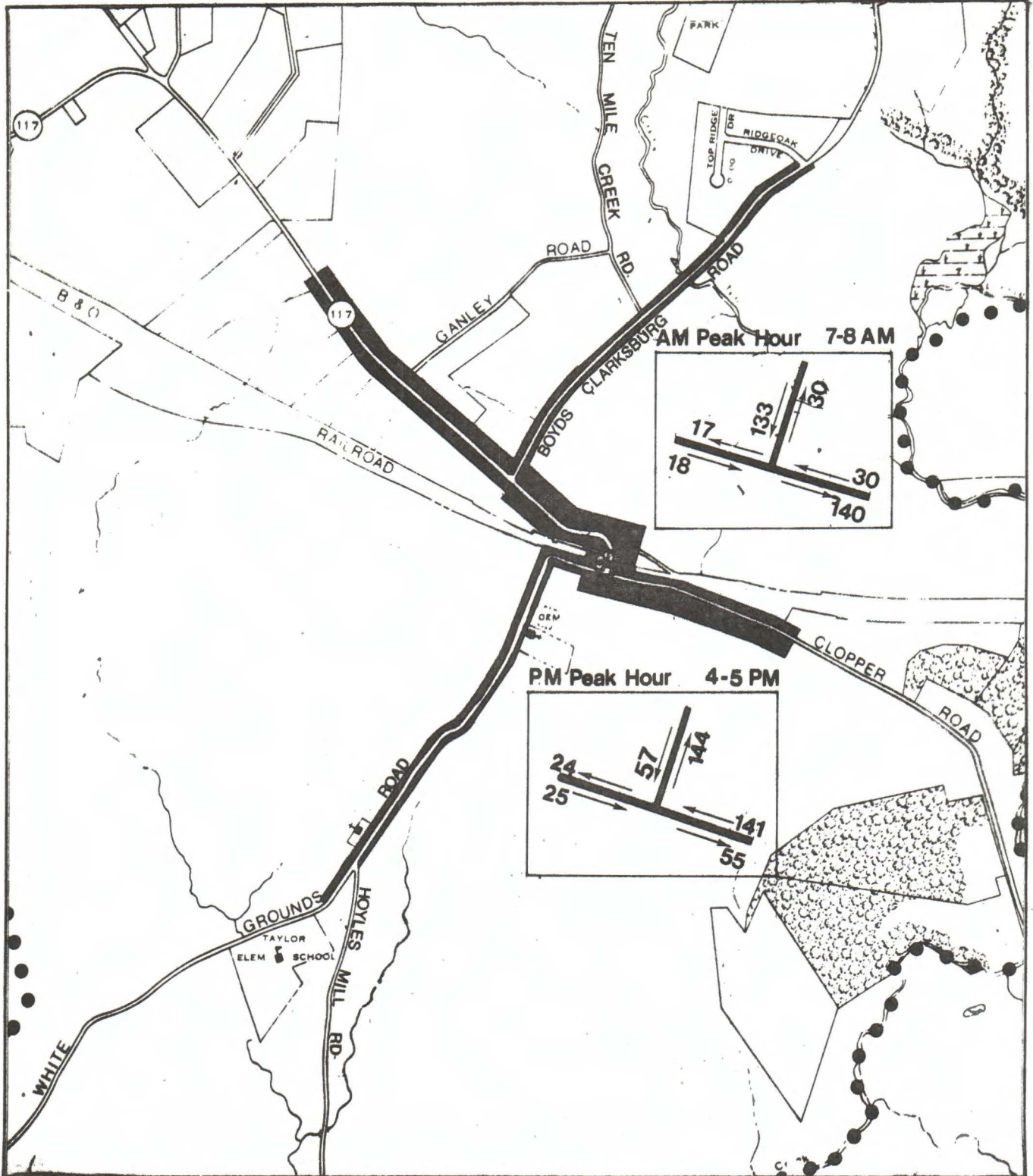
Chapter 3

TRANSPORTATION

The transportation system in the Boyds area is in need of roadway realignment, upgrading and rehabilitation rather than major new construction. The Master Plan time horizon for the local highway improvement recommendations is 1995. Since it is difficult to make a projection with any kind of accuracy beyond that time, it is the goal of the transportation plan to provide a good affordable level of service while maintaining the rural character so highly valued by the citizens of Boyds. Therefore, it is the intent of the plan to restrict highway improvements to those which are deemed necessary and financially feasible.

Goals

- . It is a major objective to upgrade the existing facilities rather than to encourage new construction with the emphasis on service capacity improvements to existing facilities such as improved signing, widening and the addition of turning lanes.
- . The Master Plan of Boyds must also be aware of the transportation needs of the adjacent communities and to coordinate proposals as closely as possible with those areas. The adjacent communities which must be handled in a sensitive manner are Clarksburg and Germantown, both designed as Corridor Cities.
- . Much of the existing traffic in the Boyds area is north-south through traffic, Clopper Road (Maryland Route 117) being the most heavily traveled road in the area, with an estimated 1,800 to 2,300 vehicles per day, while Barnesville Road carries 1,400 to 1,900 vehicles per day. White Grounds Road and Clarksburg Road carry 600 and 700 vehicles per day respectively. There is a definite need to improve the existing sight distance and roadway alignment in order to accommodate the through traffic in a safer and more efficient manner, while also improving local circulation (see Figure 9).
- . Another major objective is to provide a safe and convenient pedestrian and bicycle circulation system for Boyds. The connection of the commercial area, rail station, churches, day-care center, parks and school with each other will improve the existing pedestrian/bicycle system, rendering it a viable alternative to automobiles for local circulation (see Figure 11).
- . The transportation plan should encourage the use of commuter rail for down-county work trips by providing convenient access to the commuter rail station, both for vehicular trips and pedestrians. A sufficient number of parking spaces should be made available, ideally with a joint-use possibility.
- . The Boyds Master Plan recommends that a local park be located at the intersection of Barnesville Road, Clopper Road and White Grounds Road. In order to serve this local park an access road and parking area should be provided as well as improvements made to the sight distances in the vicinity of the Baltimore and Ohio Railroad bridge.



BOYDS MASTER PLAN

AVERAGE DAILY TRAFFIC

9
FIGURE



- Careful planning should be undertaken to provide environmentally sensitive access to Little Seneca Park and Regional Lake Site No. 3.

In order to accomplish these goals it is recommended that the following actions be undertaken:

Intersection Realignment

The development of the local park will provide an excellent opportunity to improve the existing intersection at Barnesville, Clopper and White Grounds Roads, thus improving the highway design, while at the same time providing acceptable access and circulation for park traffic. At present the 90 degree intersection is the minimum design standard for trucks and buses. It is often necessary for trucks and buses to swing wide onto the crossroad to negotiate this turn and, in so doing, encroach upon the opposing traffic lane.

An undeveloped parcel of land lies directly adjacent to the Presbyterian Church which could accommodate the realignment of White Grounds Road. This would eliminate through traffic at this location and encourage pedestrians to use the underpass below the tracks. A one-way entrance on existing White Grounds Road at the intersection of this re-alignment would also eliminate the visibility problem and new alignments would permit movements to be made in an open area.

Realignment of Route 121

The construction of Lake Site 3 on Little Seneca and Ten Mile Creeks will necessitate the relocation of Route 121 (Clarksburg Road) from near Ridgeoak Drive to Barnesville Road. A preliminary engineering study indicates that the new alignment shown on figure 10 would be the most practical and cost-effective. However, final design of this realignment will occur when the overall design of the lake is considered.

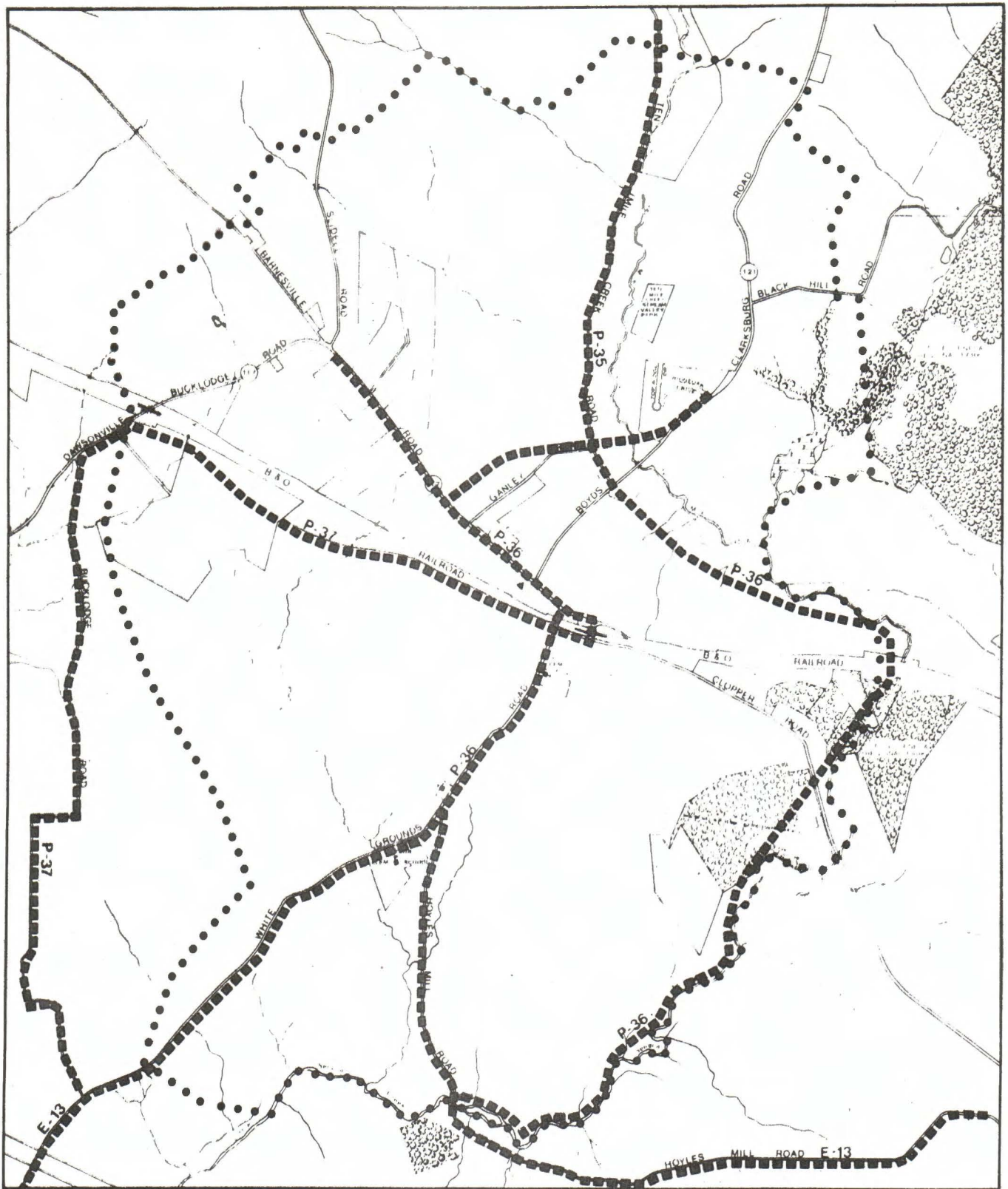
Rehabilitation of Commuter Rail Station

The Montgomery County Department of Transportation has recommended a number of improvements to the Commuter Rail Station. It is expected that greater rail patronage will create additional demand for the commercial area to develop as a one-stop shopping area. The transportation plan recommends the following specific improvements as part of a Commuter Rail Improvement Project.


- Develop part of the recommended commercial expansion site as a commuter parking lot in anticipation of future expansion.
- Consolidate commercial area parking with commuter rail parking for maximum use.
- Build the platform and shelter in such a manner that pedestrian use of the stations will be encouraged. In conjunction with this, the existing pedestrian underpass should be rehabilitated.
- The Germantown Master Plan proposes a first stage public transit system involving bus service linking Germantown with employment centers in Gaithersburg, Rockville, and Washington. Additional transit improvements

are also proposed in that Master Plan, including a rail transit extension of the Metro System. It is recommended that Boyds coordinate all public transit programs for their area with those for the Germantown area in order to maximize resources and increase patronage.

- The recommended bicycle paths shown in this plan will be an integral part of the total Master Plan for Bikeways in Montgomery County. Design standards for bicycle paths in the Boyds Plan should be consistent with those developed in the Master Plan for Bikeways (see Map 11).
- Implementation of the plan for Lake Site #3 and the Regional Park will require relocation of the existing bicycle path along Ten Mile Creek Road. This section of the bicycle/pedestrian system will then be located in the park roughly paralleling the edge of the lake, eventually connecting into the bicycle path on West Old Baltimore Road.



Bicycle & Pedestrian Paths



FEET
 0 1000 2000
 METERS
 0 300 600

BOYDS MASTER PLAN

RECOMMENDED BICYCLE & PEDESTRIAN SYSTEM

11
 FIGURE



Chapter 4

PUBLIC FACILITIES

Water Supply

Various schemes have been explored to provide Boyds with a reliable drinking water supply which is of acceptable physical, chemical, and bacteriological quality. The major factors taken into consideration were availability, safety, reliability, treatment, distribution requirements, costs and environmental impacts.

The Boyds Master Plan recommends extension of the existing Washington Suburban Sanitary Commission's water mains from Germantown to Boyds and the provision of a community distribution system.

In the 1971 report, Evaluation of Water and Sewerage Services for Boyds, WSSC recommended extension of a 10 inch water main from an existing 24 inch main at the intersection of Routes 118 and 117 to the intersection of Routes 121 and 117 in Boyds. This line would follow Route 117 for a distance of approximately 12,500 feet. In 1974, a 12-inch water line was placed in service at the Churchill town development near Germantown. The distance between a connector point at the intersection of Wanegarden and Wisteria Drives and Routes 121 and 117 at Boyds is approximately 7,000 feet. The proposed alignment recommended in the Boyds Pilot Study for the WSSC extension would follow the Baltimore and Ohio Railroad right-of-way, crossing over to Route 117 near the railroad underpass at Boyds which it would then follow to its intersection with Route 121.

This alignment follows the shortest route between Boyds and the nearest existing WSSC connection point and, therefore, has the least capital cost of any possible WSSC extension. While other possible alignments could be extended farther east, along Route 117, to do so might encourage development which is inconsistent with the implementation phases of the Germantown Master Plan. Several homes located on Route 117, immediately east of Boyds and generally within the limits of the community, could be included in the water service envelope through use of the proposed alignment. The proposed distribution system configuration within the Boyds community would provide a distribution main available for tapping along White Grounds and Hoyles Mill Roads, along Route 117 beyond Ganley Road and also on Ganley Road.

Sewers

The existing sewer situation in Boyds is less than adequate and presents some special problems which must be solved if the town is to continue as a viable community. Although the majority of homes have working septic systems, there are several which totally lack indoor wastewater facilities. There have also been a number of instances when existing systems have failed.

A standard sewer system using large diameter pipe and a gravity flow process involves a substantial cost to provide a wastewater treatment system to a community, especially in a rural area where the houses are not immediately adjacent to one another. This high installation cost usually renders central collection systems in rural areas infeasible.

However, the use of a pressure system which utilizes small diameter plastic pipe provides an excellent alternative solution. Installation of this system involves connecting the existing house wastewater line to a Sewage Grinder Pump (SGP) unit which shreds waste and pumps it through small diameter plastic pipes which replaces a conventional sanitary sewer line. The existing septic tank remains connected and is used as an emergency overflow tank. Using this approach, the staff of the Montgomery County Office of Community Development has developed a possible cost-effective approach to this type of sewer system.

Basic components of the system are the pump-storage-grinder unit consisting of a master pump, grinder, check and relief valves and control tap; a concrete storage tank; plastic effluent pipe; and a failure alarm. The system requires 20 amp, 110 volt electrical service with the piping and pump storage grinder installed below the frost line to prevent freezing.

The collection system consists entirely of small diameter pressure lines which range in diameter from 1½ to 3 inches, combined with storage-grinder-pumps which can be designed to serve single, dual or multiple dwelling units. By locating the storage-grinder unit so that it serves more than one home, the cost per dwelling unit can be reduced.

Treatment is handled by a batch aerobic treatment unit. This treatment unit consists of a single container in which aeration, sedimentation and decanting of treated effluent are accomplished. The operation cycle would include more than 20 hours of aeration, 3 hours of sedimentation and 30 minutes decanting of the effluent, all of which is automatically controlled. The small amount of sludge which accumulates in the tank can be removed by pumping and hauling as necessary to designated WSSC septic tank pumpage acceptance sites. Sludge removal would be necessary perhaps twice annually.

The size of treatment facilities is based upon information regarding waste flows in rural areas. It has been well documented that rural water usage in homes with water consumptive fixtures and appliances is slightly more than 40 gallons/person/day. Because Boyds will have the advantage of water from the extension of the WSSC system, it has been assumed that water usage may be slightly higher than if it were supplied by wells. For this reason, calculations to determine the feasibility of this system for Boyds used a figure of 50 gallons/day/person.

The basic components of the recommended wastewater disposal system are relatively simple. These components would include secondary treatment through the batch-aerobic process followed by land irrigation. Secondary pre-treatment is necessary to comply with Maryland criteria prior to disposal on land. Use of aerobic secondary processes, is also necessary to enable nitrification to occur in the partially treated wastes. This is beneficial prior to land irrigation to prepare the waste for nitrogen removal by de-nitrification which occurs in the soil.

The secondary treatment units necessary for this alternative are readily available manufactured units which require no special fabrication or components. The secondary treatment unit can be placed in the ground and the entire system blended into the natural environmental setting.

Overall, this system represents a feasible and innovative approach to rural communities having problematic soil conditions and a small volume domestic wastewater flow.

This system is competitive with and less costly than a WSSC extension while accomplishing the objectives that are of vital importance to the future of this and other rural communities. Important aspects of this system which are critical to both the system and the plan are:

- Providing a disposal system that has a limited capacity for future growth, thus protecting the character of the community by maintaining its low density and following the goals established by the Rural Zone and the General Plan for rural areas.
- The establishment of a sewerage system will provide the town with the growth potential necessary to sustain the needs of its growing population and provide support for its existing and proposed community facilities.

STAGING

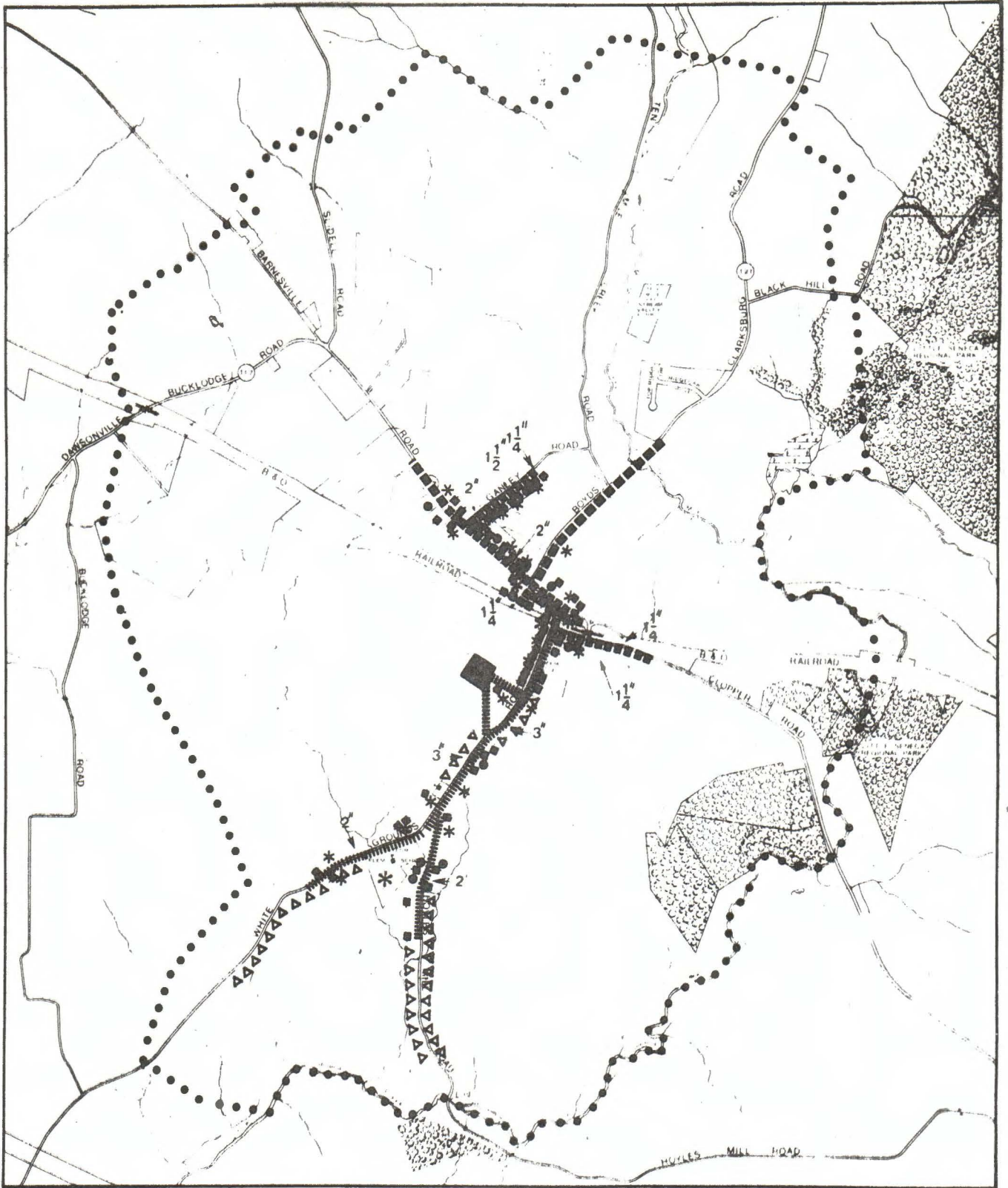
In order to address the most severe sewage needs in Boyds first and to ensure that the implementation of the recommended system is not undertaken without sufficient community support, the proposed service area is divided into two stages which are shown in Figure 12. Since the problems are generally more severe south of Route 117, it is anticipated that this section will be constructed first with the northern portion of the planning area to be served at a later date. The full-size treatment facility and disposal site will be developed along with the stage 1 collection system. Thus when stage 2 is ready for inclusion in the sewerage system, all that will be required is the installation of the collection system and the connection to the 3" pressure sewerline at the northern point of White Grounds Road.

Implementation of this recommendation shall proceed only after 60 percent of the existing users within either stage 1 or stage 2 demonstrate their willingness to connect to this system by filing a petition with the Montgomery County Office of Environmental Planning and/or the County determines that a public system is required to safeguard the public's health.

In the event that no petition is filed prior to the adoption of the FY-1980 Ten-Year Water Supply and Sewerage Systems Plan, the Planning Board will reconsider all master plan elements which are contingent on the construction of the public water and sewer system.

COSTS FOR INSTALLATION

The costs for installation of such a sewer system are summarized in Table I. These figures are rough estimates developed in 1976. Consideration should be given to the inflation factor, depending upon the time lapse before implementation. It



<p>■ Disposal Site</p>	<p>● Single S.G.P. Unit</p>	<p>■ Dwelling Unit on Store</p>	<p>0 1000 2000 0 300 600 FEET METERS</p>
<p>----- Stage 1-Pressure Sewer Line</p>	<p>* Dual S.G.P. Unit</p>	<p>▽ Additional Dwelling Unit on Store #35-40</p>	
<p>———— Stage 2-Pressure Sewer Line</p>	<p>* Multiple S.G.P. Unit</p>		

BOYDS MASTER PLAN **SEWER STAGING PLAN** **12**
FIGURE

should also be noted that a one time charge will occur, of approximately \$350, to connect the house to the Storage-Grinder-Pump. Costs will also vary depending upon the number of homes which can hook into the pump-storage-grinder. Existing homes will often be located so as to necessitate individual systems. As new homes are constructed, it will be possible to locate them so that they can share a unit, thus reducing costs. Installation and operation of such a system will be undertaken by an appropriate public agency.

TABLE I
SUMMARY OF TOTAL COSTS FOR
BOYDS TWO-STAGE SEWERAGE SYSTEM

<u>Item</u>	<u>Stage I</u>	<u>Stage II</u>	<u>Total</u>
Collection System	75,200	62,500	137,700
Treatment System	108,200	(0)	108,200
Disposal System	88,000	(0)	88,000
Total Capital Costs	\$ 271,400	\$ 62,500	\$ 333,900

Chapter 5

DIABASE DEPOSIT

Located within the Boyds Planning Area is a large deposit of diabase stone, which, when quarried and processed, makes excellent crushed stone. Diabase is an igneous rock composed of rather coarse crystals. Preliminary analysis of actual rock samples from the Boyds deposit by the U.S. Geological Survey and the Bureau of Mines indicate that it is free of asbestos minerals.

The deposit is located around and under the community of Boyds, south of the Baltimore and Ohio Railroad and east and west of White Grounds Road. At this time, a large portion of the deposit is owned by a crushed stone company which has estimated that its property contains a 50 year supply of stone.

The possibility of a quarrying and crushing operation is of great concern to the citizens of Boyds, because of its potential effect on the character of the community. It is also of concern to other areas which would use or abut potential haul routes. Such a quarry has been vigorously and consistently opposed by the community. Because of the community concern and the economic potential of a quarry, extensive study and discussion of this subject was undertaken in the preparation of this plan. Consultants for the owners of the deposit made studies of the environmental impact of one possible site and operation. Citizens of the area reviewed this study and conducted studies of their own. Staff of The Maryland-National Capital Park and Planning Commission evaluated these reports and also conducted some additional analysis. In spite of these extensive analyses, questions concerning such an operation have not been fully resolved, and probably cannot be, in the absence of a specific application and without consideration of the impacts on other communities near Boyds. Only at the point of a specific application, for instance, would the necessary detailed studies be required as a part of the review by the state and local agencies whose approval is necessary before any quarry or stone crushing plant may be operated.

Therefore, this Master Plan does not recommend a quarry as a feature of the plan. If such a use were determined to be desirable or necessary, from a county-wide perspective, this master plan, and others where its impact would be felt, should be amended to ameliorate the impacts and to allow reconsideration of community objectives and land uses.

The diabase deposit is contained on privately owned land recommended by this plan to continue in the Rural Zone. Given the present character of Boyds, this is clearly the most appropriate zone for this land. It is consistent with the other objectives of the plan to preserve the rural character of the community and to restrict any modest growth to the areas of existing half-acre zoning. The Rural Zone permits a variety of rural and agricultural uses, including quarrying, as Special Exceptions. It does not, however, permit stone crushing or other manufacturing operations.

The application of the Rural zone to the land under which the deposit lies, therefore, achieves two things. It ensures that a crushing plant cannot be built without rezoning to a heavy industrial or resource recovery zone and it prevents any intensive land use which would pre-empt the site and make infeasible any future consideration of its development as a quarry and crushing facility.

While it may be obvious, it is worth bearing in mind that quarrying is an industry which does not enjoy the luxury of alternate site selection; the mineral must be extracted where the deposit is located. Its presence cannot be ignored and the possibility that its owners will, at some time, make application to extract this valuable resource is real. Application of the Rural zone the area will prevent pre-emptive uses of the land, and the diabase deposit may be considered for inclusion in the state Critical Areas program.

Problems

Any application for a permit to quarry will be subject to extensive review by all agencies concerned with quarrying and the attendant problems which it generates. The purpose of outlining the following problems is to delineate the scope and direction which appropriate reviews should take. In order that judgements may be accurately reached, criteria should be developed and the proposal carefully examined in the following areas:

Siting of the Activity

While location of the quarry is limited by the extent of the deposit, the specific site chosen and its initial and ultimate size are important questions, as they will determine possible truck routes, buffering requirements and raise other questions about the impact of blasting, crushing and hauling operations on the Boyds Community.

Buffering and Community Protection

There are several aspects of quarrying operations which have a major impact on a rural village environment. The visibility of the machinery, loading and stockpiling areas, roadways and the hole itself must be carefully examined in terms of its effect on residents, schools and other institutions in Boyds. Berming and extensive landscaping or even grade separation of traffic should be studied, along with other approaches to mitigate the visual impact. The kind of rural community envisioned by this plan is not likely to survive a quarry/crushing operation and this probability must be weighed and confronted directly in making a decision to operate a rock crushing industry in Boyds.

Transportation

Any proposal for a quarry operation should involve designation of the haul route which will be used, including a thorough examination of the possible use of rail-haul. It would appear likely that a separate access road to a quarry would be necessary. Of special concern is the intersection of such a road with community roads, and its proximity to homes or to community facilities such as the school and the park; examination of the roadway capacity, which will determine the level of service (LOS) on any planned haul route and all affected intersections. Road

analysis should include Md. 117 and the tributary routes through Germantown, Clarksburg and Gaithersburg which would be impacted by a large volume of heavy truck traffic from the quarry. Assurance must be given that all safety requirements would be met including an analysis of structural capacity of bridges and haul routes and sufficient sight distance to ensure adequate visibility.

While the public roads to be used would surely be state highways or county arterial roads, one initial problem is the extent to which they must be improved to meet acceptable standards for sight distance and width.

Noise

Approval of any application should be based upon an awareness of the realistic noise impact on the Boyds, Germantown and Gaithersburg areas. Of particular importance is the determination of who, if anyone, will bear the cost of noise control. Both the noise of quarrying and crushing and that of haul trucks should be assessed. The character of a rural village should not be very heavily impacted by sustained high levels of noise.

Site operation noise must meet the 60/dBA daytime (50 dBA night time) limit of the Maryland Department of Health and Mental Hygiene. Additionally, measures must be taken to assure that noise levels along the haul route are in conformance with any Noise Ordinance which is legally enforceable at the time of application, and after.

In view of the extensive amount of buffering necessary to control noise along a route, it may be necessary to take measures to solve the noise problems at the source, i.e., the muffler of the truck. Considerable research and development is being undertaken in this area by truck manufacturers and it is vital that such advances be utilized.

Dust

The amount and the components of the dust that might be generated from a quarry are a matter of great interest, not only to the residents of the area, but to all persons with environmental and health concerns. While asbestos has rarely been found in diabase stone, specific studies would need to be verified at the time of application. At such time as a quarry might be put into operation, the applicant will be required to meet any and all control measures established by appropriate agencies.

Among the dust control measures which could be considered are the following:

- Pave all access roads near public roads and provide appropriate dust retardant treatment along the remainder of these access roads.
- Operate a mandatory truck spray facility which would wet down materials and clean trucks as they leave the site.
- Wash aggregate by the application of water combined with a moisture retaining agent from spray nozzles within the processing operations.

- . Leave a 500 foot buffer to the nearest neighbor or public road and 200 feet to a railroad right-of-way.
- . Locate the crushing plant in as low an area as possible.
- . Construct and landscape berms wherever necessary to provide visual screening and to collect any fugitive dust.

Hydrologic Impact

A number of questions relating to the water resources and hydrologic problems in the area have been raised, in particular, the effect that a quarry might have upon Lake Site No. 3, private well water supplies and local streams. In the opinion of geologists, the diabase sill was injected into a formation of country rock which was baked during the process to form an impervious ring around it. The country rock is so dense and hard that water cannot seep through it, therefore preventing the quarry from draining off water from surrounding sources.

However, it is essential that any quarry proposal, which might be submitted, address this problem and furnish conclusive evidence that a quarry would not have an adverse hydrological impact on the area.

In order to achieve this, the following measures should be taken:

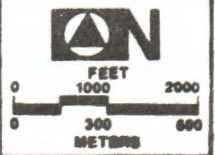
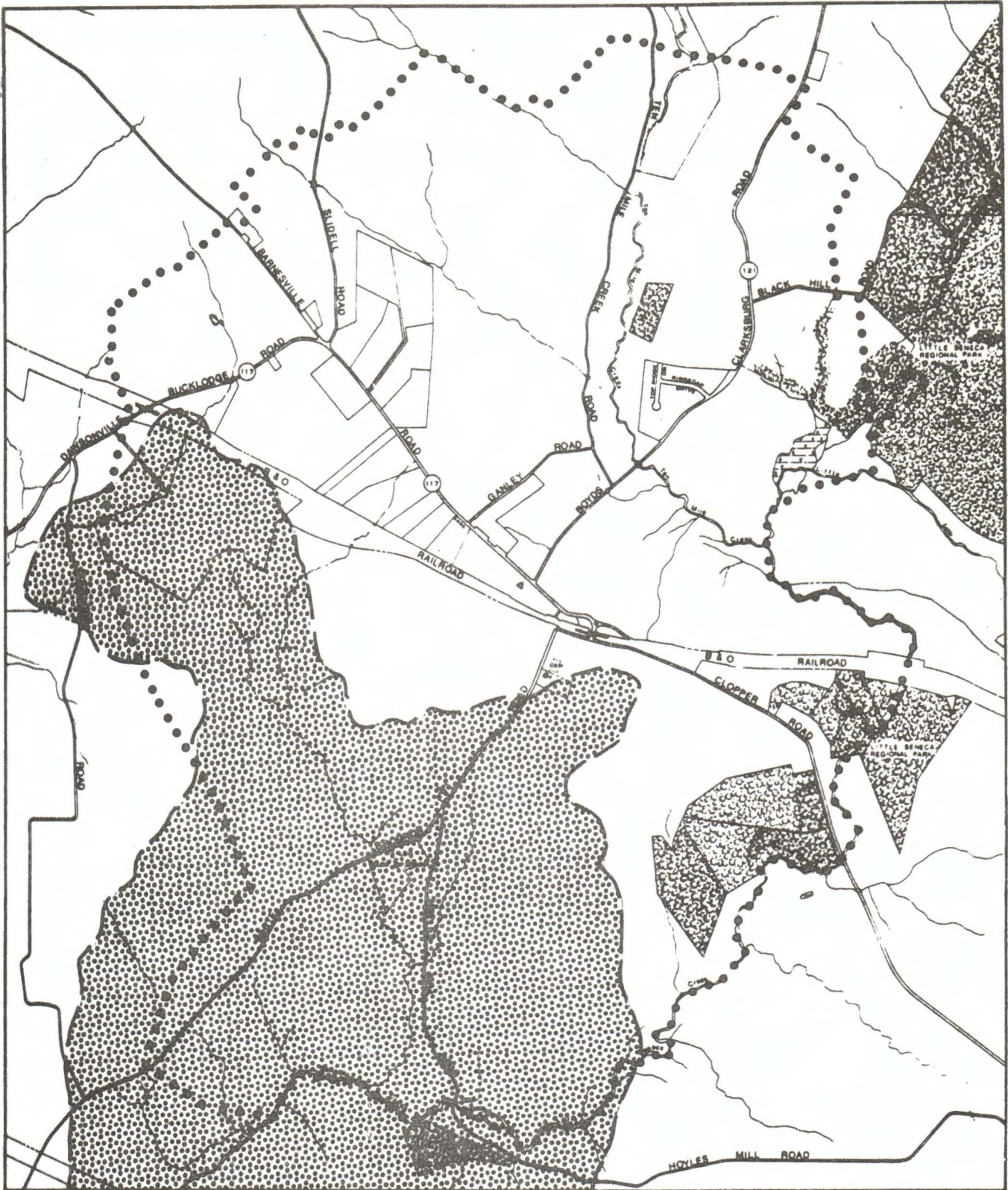
1. A Discharge Permit must be obtained to discharge water from the site. All clean water and discharge regulations must be met in accordance with the regulations of the Maryland Department of Natural Resources.
2. Stormwater management and sediment control measures must be in compliance with appropriate ordinances as administered by the Department of Environmental Protection.
3. In order to avoid well-water draw down, local streams which have been diverted around the quarry should be returned to their natural cause beyond the quarry.

Land Use Controls

As pointed out earlier, the Rural zone for which the land is recommended allows quarrying under the Special Exception process but does not allow rock crushing operations. In order for stone crushing equipment to be erected and operated on site, it would be necessary to take one of the following steps:

1. Submit an application for change in zoning from Rural to I-2 (Heavy Industrial) for all or part, of the tract. Rezoning to this zone will require proof of mistake at time of original zoning or evidence of a substantial change in the character of the neighborhood. This would not be a likely prospect if this plan is implemented by a Sectional Map Amendment.
2. Obtain a zoning text amendment to allow a crushing operation in the Rural zone under the Special Exception process.

3. Create a new zoning category, a Resource Recovery Zone, which will encompass natural resource extraction and certain processing operations. Such a zone should contain strict performance standards and requirements to ameliorate direct and secondary community impacts. It should also be applied only where recommended by a master plan. Thus, it would be necessary to amend the Boyds master plan as a pre-requisite to application of the Resource Recovery Zone.



BOYDS MASTER PLAN

DIABASE DEPOSIT

13
FIGURE



Chapter 6

IMPLEMENTATION

As can be readily seen from the detailed description of each element of the Boyds Plan, the changes which will occur will not occur simultaneously nor will they occur immediately. Most of the elements are not independent actions; they depend upon other actions for their own activation.

It is seen as likely that the first action to take place will be the development of a community park, the funding for this having already been approved in the Capital Improvement Program. This will involve a roadway re-alignment, a minor change to be sure, but one which will be the first step in improving the circulation pattern in Boyds. Upgrading of the commuter rail stop is presently under study. Should this project be approved it is very possible that this action will generate some commercial development. At the present time, development of new homes in the area is difficult, due to the problems encountered with water and sewer service. Installation of a two-phase water and sewer system should make it possible for new homes to develop, primarily in the vicinity of White Grounds and Hoyles Mills Roads. This is a specific example of the interdependence of actions in the area; a secondary action will only occur if it is preceded by another action which will provide the necessary infrastructure.

The development of the Seneca Creek Watershed, with Lake Site No. 3 if approved, and a Regional Park Facility should come into fruition in the later part of the 1970's.

To summarize, it is likely that specific actions in the Boyds area will fall into the following order of priority:

1. Sectional Map Amendment.
2. Development of a Community Park and minor roadway realignment.
3. Upgrading of the commuter rail facility.
4. Installation of a two-phase water and sewer system.
5. Development of new homes, primarily along White Grounds and Hoyles Mill Roads.
6. Development of Seneca Creek Watershed, Lake Site No. 3 and Regional Park Facility.

These are the primary actions which are appropriate and beneficial if Boyds is to develop in an orderly but restrained manner and at the same time retain its pleasant rural character.

The Maryland-National Capital Park & Planning Commission

8787 Georgia Avenue

Silver Spring, Maryland

November, 1977

