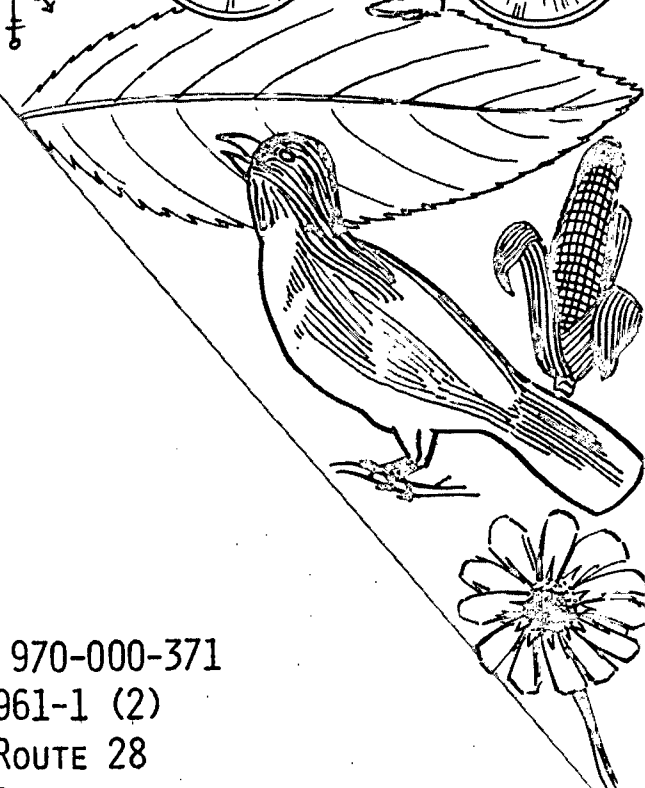
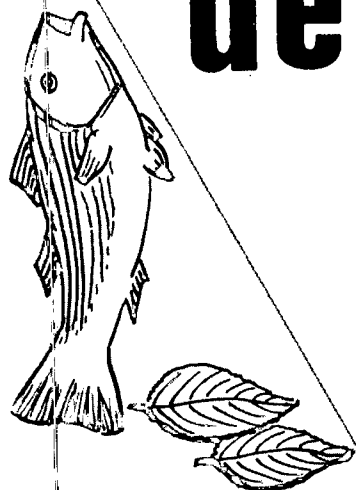
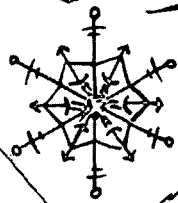
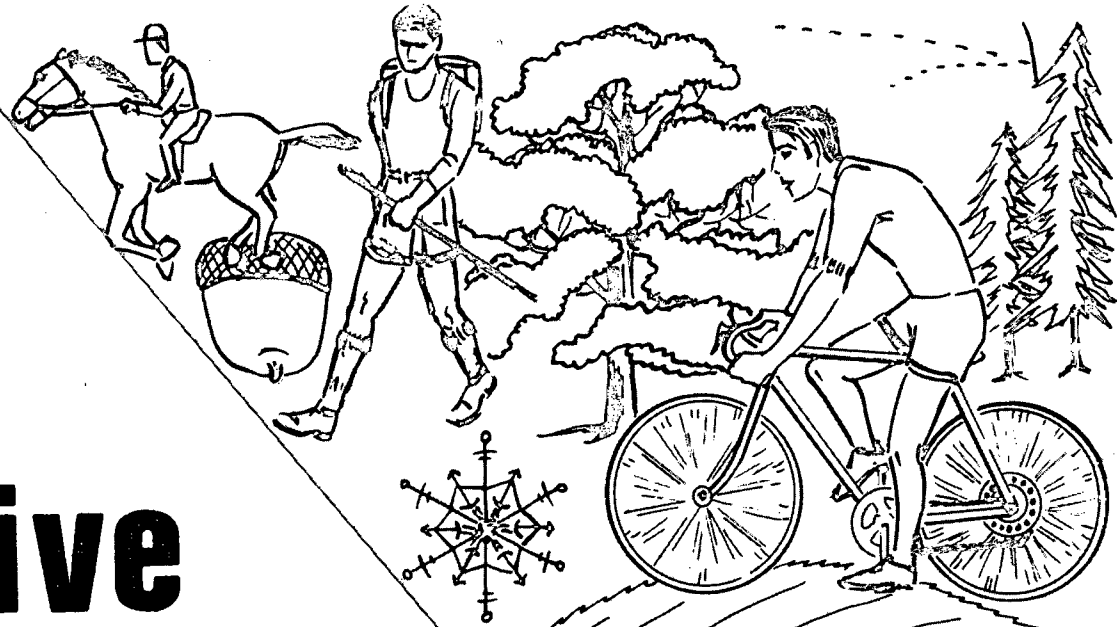


# final negative declaration



FOR:

CONTRACT No. M 970-000-371

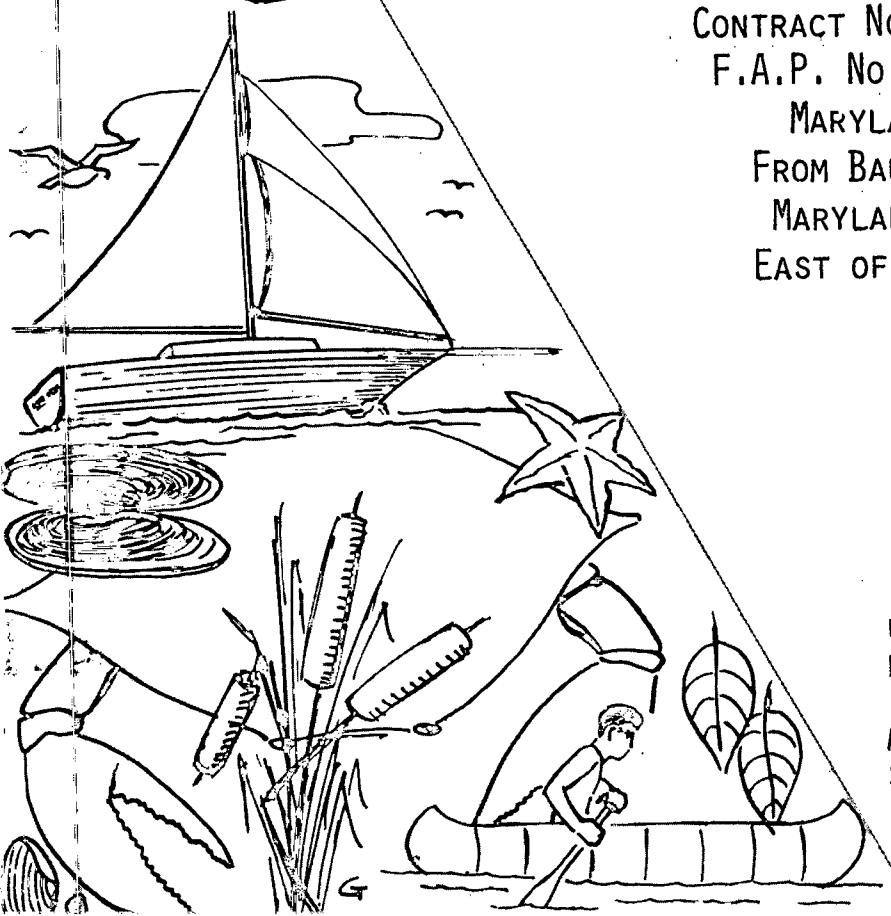
F.A.P. No. F 961-1 (2)

MARYLAND ROUTE 28

FROM BAUER DRIVE TO

MARYLAND ROUTE 609

EAST OF BRADFORD ROAD



prepared by  
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
and  
MARYLAND DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION

Federal Highway Administration  
Region III

Maryland Route 28  
From Bauer Drive to  
East of Bradford Road  
In Montgomery County, Maryland

ADMINISTRATIVE ACTION


FINAL NEGATIVE DECLARATION

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION

Submitted Pursuant to 42 U.S.C. 4332 (2) (C), 23 U.S.C. 128(a)

M. S. Caltrider  
State Highway Administrator

2/27/79  
Date by:   
Hal Kassoff  
Director, Office of Planning  
and Preliminary Engineering

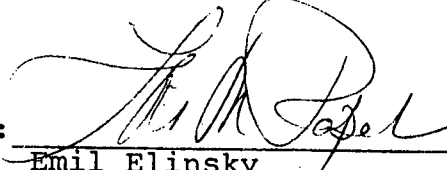
2-28-79  
Date by:   
FOR Emil Elinsky  
Division Administrator  
Federal Highway Administration

TABLE OF CONTENTS

	<u>Page</u>
I. Summary	1
II. Location and Description of Project	4
A.. Project Location	4
1. Conditions of the Existing Road	4
2. Socio-Economic Description	6
3. Natural Environmental Features	11
4. Land Use Planning	14
5. Traffic Data	16
B. Description of the Alternates	20
1. The Selected Alternate	20
2. Alternates Considered but not Selected.	30
III. Need for the Project	33
IV. Basis for a Negative Declaration	37
V. Social, Economic, and Environmental Factors	38
A. Socio-Economic	38
B. Historic and Archeological Sites	42
C. Air Quality	46
D. Noise	50
E. Natural Environment	68
VI.. Coordination and Correspondence	70
VII. Appendix	82

LIST OF FIGURES

<u>Figure Number</u>		<u>Page</u>
1	Location Map	2
2.	Study Area Map	5
3.	Census Tracts	7
4.	Land Use	15
5.	Traffic Data	18
5a.	Traffic Data	19
6.	Roadway Plan (Alternate 2)	21
6a.	Roadway Plan (Alternate 2)	22
6b.	Roadway Plan (Alternate 2a)	23
7.	Maryland Route 115 and Maryland Route 28 Intersection	24
8.	Maryland Route 28 and Maryland Route 97 Intersection	25
9.	Typical Roadway Section (Alternate 2)	26
9a.	Typical Roadway Section (Alterate 2a)	27
10.	Profile	28
11.	Historic Sites	44
12.	Historic Land Use Chart	45
12.5	Air Receptor Locations	51
13a.	Noise Sensitive Areas	58
13b.	Noise Sensitive Areas	59
13c.	Noise Sensitive Areas	60
13d.	Noise Sensitive Areas	61
13e.	Noise Sensitive Areas	62

5

LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
1	Population Data	9
2.	Housing Unit Data	10
3.	Income and Education Data	12
4.	Project Costs	32
5.	Summary of Relocations	41
6.	Carbon Monoxide Background Concentrations	47
7.	Modeling Speeds-Diurnal Traffic Curve	52
8.	Total Carbon Monoxide Concentrations-No Build	53
9.	Total Carbon Monoxide Concentrations-Build Alternate	54
10.	Pollutant Burden	55
11.	Comparison of Predicted Noise Levels: Build Alternate	65
12.	Comparison of Predicted Noise Levels: No-Build Alternate	66

I. SUMMARY

1. Administrative Action

Federal Highway Administration

- ( ) Draft (X) Final  
( ) Environmental Impact Statement  
(X) Negative Declaration  
( ) 4(f) Involvement

2. The following individuals can be contacted for information concerning the proposed project:

Mr. Roy Gingrich  
Federal Highway Administration  
The Rotunda - Suite 220  
711 West 40th Street  
Baltimore, Maryland 21211  
Phone: (301)962-4011  
Office Hours: 7:45 a.m.  
to 4:15 p.m.

Mr. Eugene T. Camponeschi  
Maryland State Highway  
Administration  
300 West Preston Street  
Baltimore, Maryland 21201  
Phone: (301) 383-4327  
Office Hours: 8:15 a.m.  
to 4:15 p.m.

3. Description of the Proposed Action

The proposed project includes the widening, reconstruction, and relocation of Maryland Route 28 (Norbeck Road) from Bauer Drive easterly for approximately 2.3 miles to east of Bradford Road at the community of Norbeck in Montgomery County, Maryland. The reconstruction will consist of a four lane urban highway with service roads. Sidewalks will also be provided on both sides of the roadway.

Figure 1 delineates the general vicinity of the project.

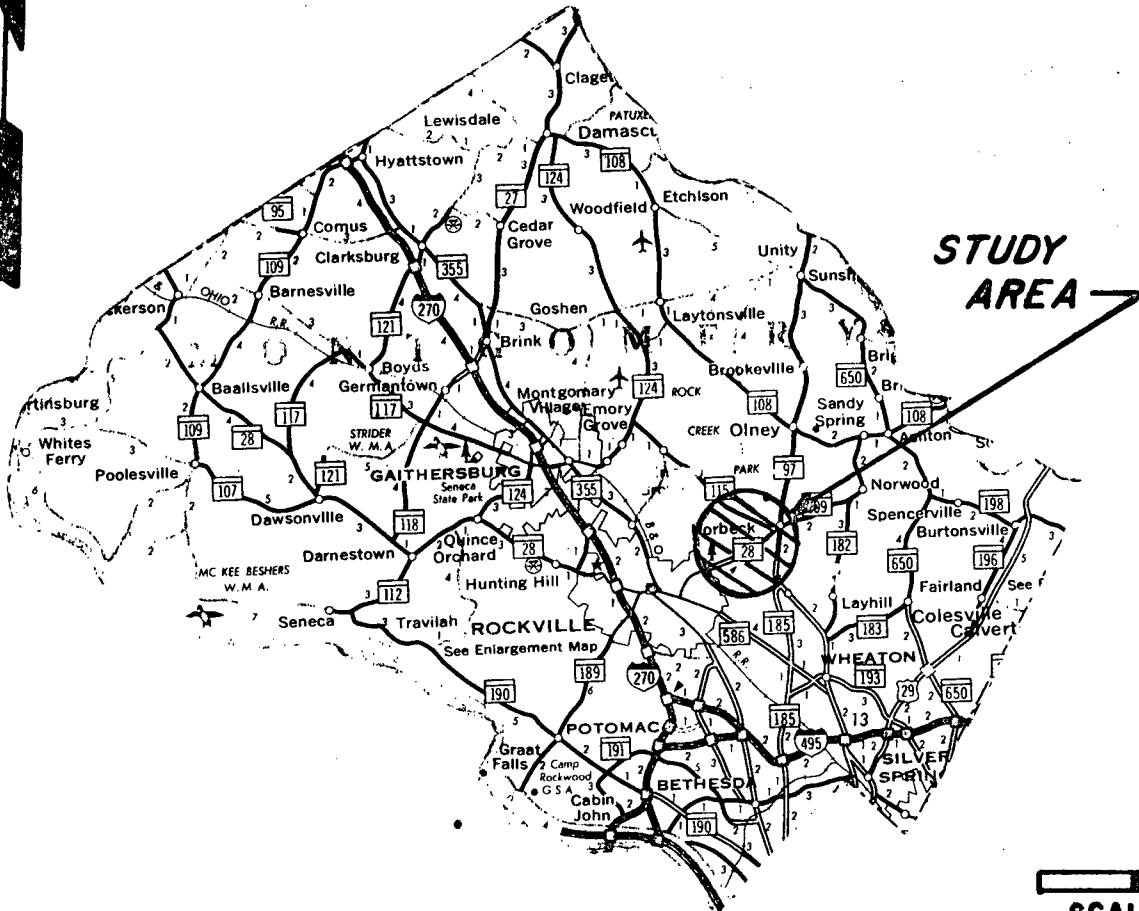
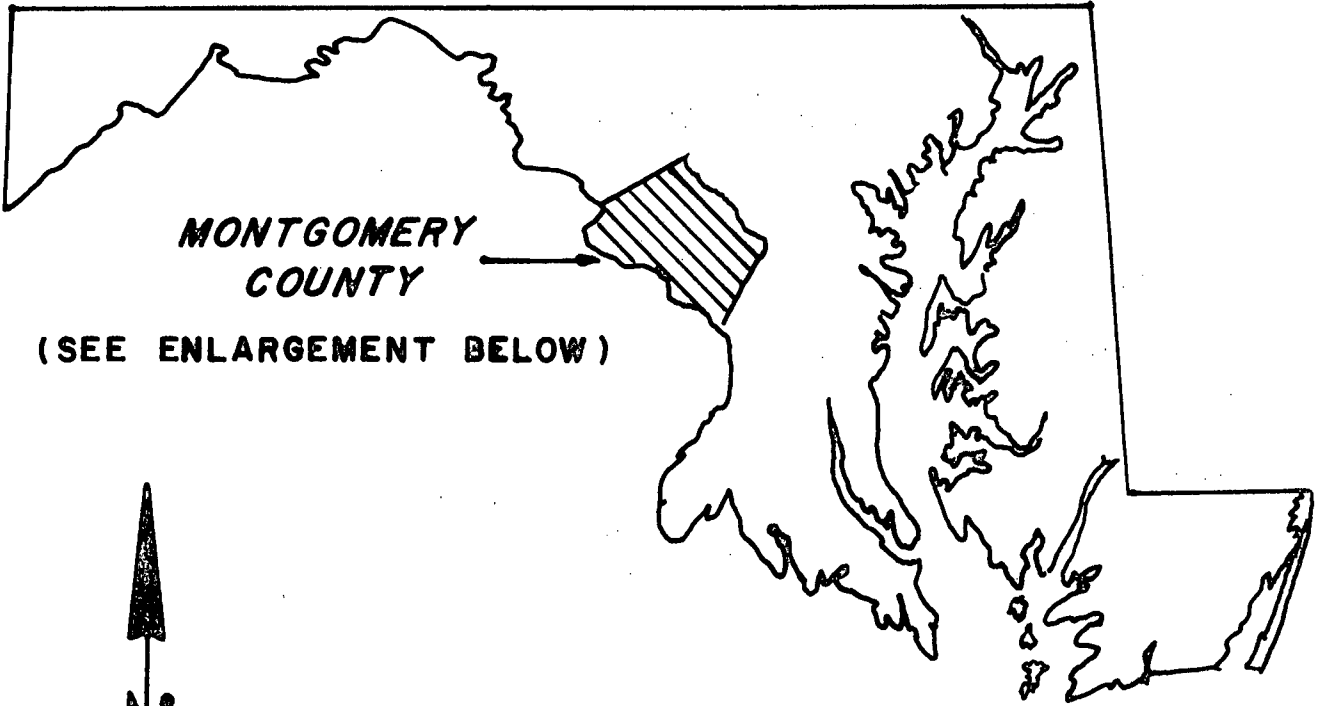
4. Summary of Environmental Impacts (Selected Alternate)

No residential units or businesses would be acquired.

Federal Highway Administration design noise levels will be exceeded at nine areas under all of the Build Alternates. Mitigation measures can be utilized at seven of these areas.

The selected alternate will not require the acquisition of 4(f) lands (historic property). There will be no effect on historic sites eligible for the National Register.

# MARYLAND



SCALE  
1" = 6mi.

## LOCATION MAP

8

The project microscale analysis determined that there are no violations of the Ambient Air Quality Standards with the selected alternate.

5. Summary of Major Alternatives

Two alternatives for improving Maryland Route 28 from Bauer Drive to Maryland Route 609 east of Bradford Road were studied. Alternate 2 (the selected alternate) provides for a 4 lane divided highway with a 16 foot wide median, and service roads on either side of Maryland Route 28. At Maryland Route 97, Intersection Alternate 2A is the selected alternate.

Other Alternates considered include Alternate 1, a four lane undivided highway; and the No-Build Alternate.

At Maryland Route 97, one additional at-grade intersection and three interchange alternates were also studied.



9

## II. LOCATION AND DESCRIPTION OF THE PROJECT

### A. Project Location

This proposed project is located in Montgomery County, Maryland, and is more particularly described as the widening, reconstruction, and relocation of Maryland Route 28 (Norbeck Road) from Bauer Drive to east of Maryland Route 97 (Georgia Avenue) at Norbeck, an approximate distance of 2.30 miles (Figure 2 and 4).

On the west terminus the project will tie into the existing four (4) lane divided Maryland Route 28 which ends at Bauer Drive. On the east terminus the project will tie into the existing Maryland Route 609 on the east of Bradford Road, with which it will have an at-grade intersection.

#### 1. Conditions of the Existing Road

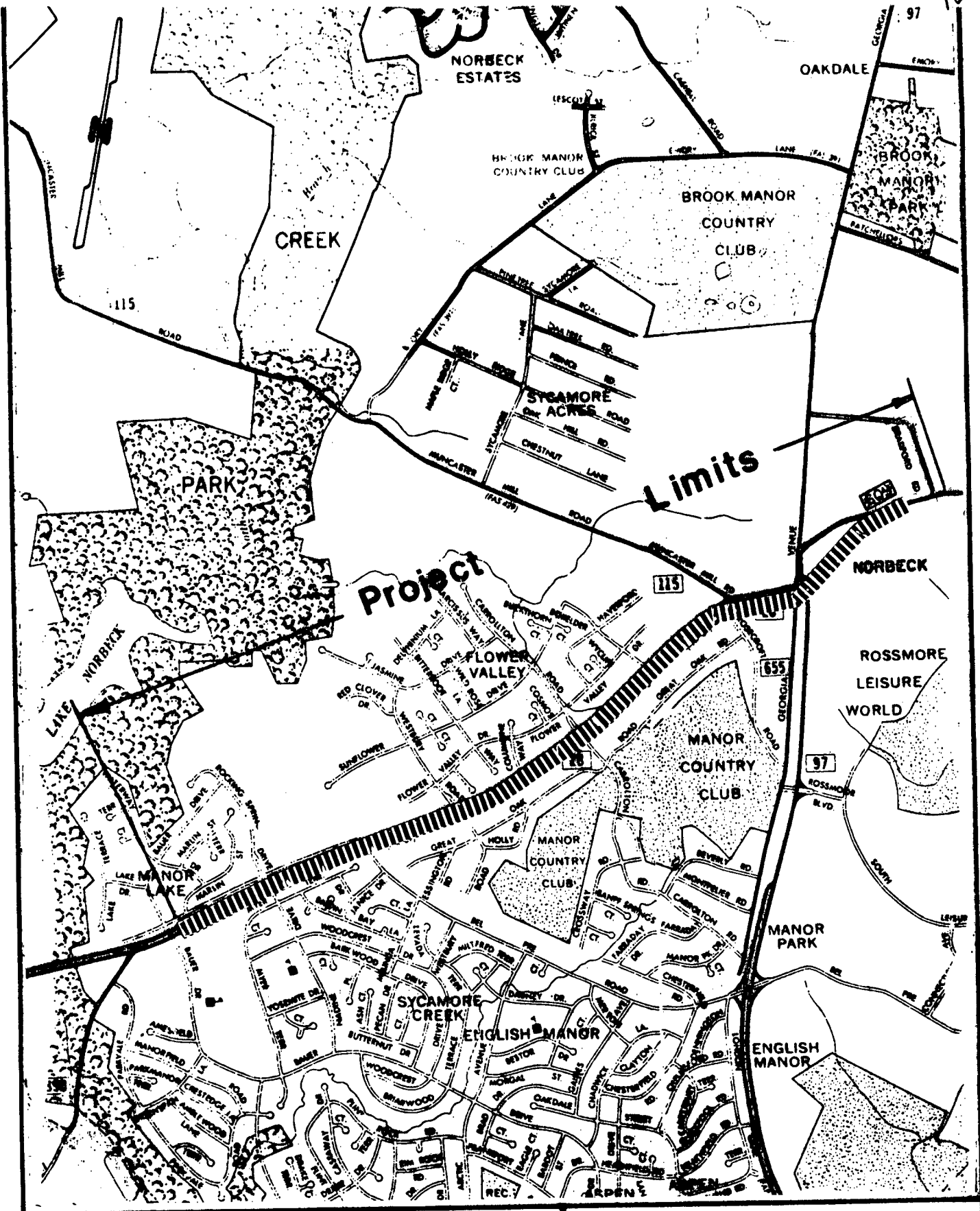
Maryland Route 28 within the study corridor is a bituminous concrete, two lane road.

From Bauer Drive to Bel Pre Road, the roadway varies from 20-24 feet, and from Bel Pre Road to Maryland Route 97 the roadway is 20 feet wide. Twenty foot service roads are located on the north side from Bauer Drive to Emory Lane and approximately 700 feet easterly and westerly of Hannans Way. The service road on the south side is also twenty feet wide and runs from approximately 100 feet east of Bauer Drive to Bel Pre Road. The median dividers between the main road and the service road vary from 15 feet to 70 feet. The existing shoulders are 6 feet wide.

The posted speed limit is 40 mph. Traffic control signals are located at the intersection of Maryland Route 28 and Bauer Drive, Bel Pre Road, and Maryland Route 97.

Utility poles are situated along both sides of the existing road, and are positioned in the medians between the service road and Maryland Route 28 where possible. Where there is no service road, they are situated along the road approximately 6-8 feet from the edge of paving. Parking is not allowed along the existing road.

The maximum horizontal curvature of the existing road is 3 degrees, and the maximum vertical grade is 4 per cent.



**Maryland Department of Transportation  
State Highway Administration**

**STUDY AREA MAP  
MONTGOMERY COUNTY  
MD. RTE. 28**

SCALE: 1" = 2000' **FIGURE 2**

As growth in the area continues and transportation demands increase, the roadway will require widening and significant improvements to insure an acceptable and safe level of service. Land along Maryland Route 28 has already been dedicated for this purpose.

## 2. Socio-Economic Description

### Population Characteristics:

The proposed project corridor is part of the Montgomery County Aspen Hill Planning Area, as well as a small part of the Olney Planning Area (see Figure 3). According to the statistics from the Maryland National Capital Park and Planning Commission, the Aspen Area has experienced a tremendous increase in population in recent years.

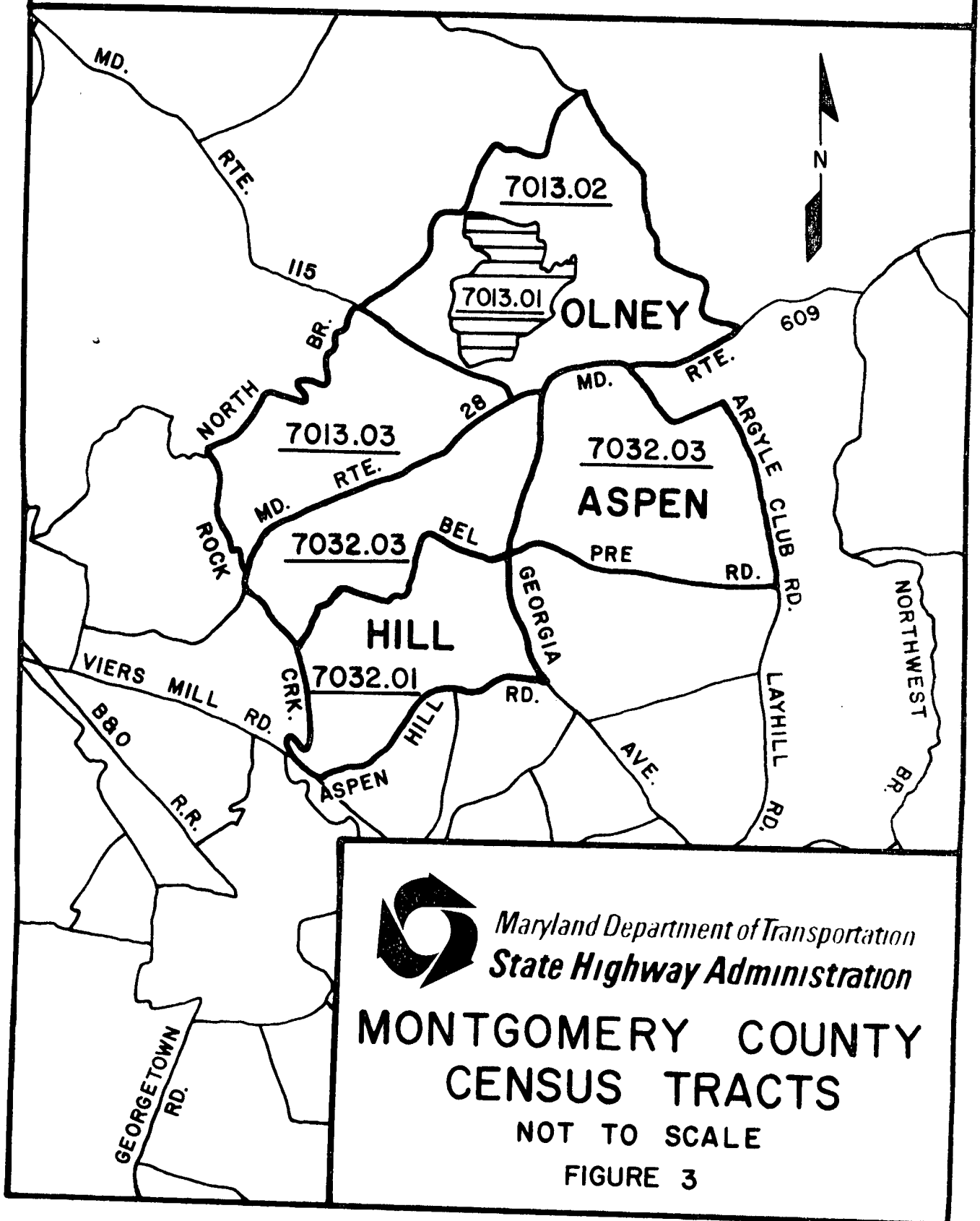
In 1955, the population of the planning area was approximately 3,550. The 1970 Census indicates that the population has increased to 40,400, or an increase of more than eleven times during the 15 year period. The fact that the planning area was more sparsely developed and had a small amount of population in the base year accounts largely for the impressive percentage increase from 1955 to 1970.

In the 1976 population count, the Aspen Hill area experienced another rapid increase from 40,400 in 1970 to 46,000 in 1976, or an increase of approximately 14% for the six year period. This indicated the population explosion had slowed down to about 2% increase per year. These figures are depicted in Table 1.

Planners of the Maryland National Capital Park and Planning Commission estimate that the Aspen Hill area has a potential for about 74,000 persons when fully developed.

The increase in the number of housing units between 1970 and 1976, ranging from 10.2% to 91.5% (except for Census Tract 7032.01--2.6%) indicates a rapid expansion of the housing stock, more rapid than the increase in population for that period. This compares with 21.8% for Montgomery County and 11.3% for the State during this period. The percent of owner-occupied housing units, averaging over 75%, indicates a fairly stable community. This compares with 61.4% for Montgomery County and 58.7% for Maryland. Table 2 presents these figures.

SOCIO - ECONOMIC STUDY AREA  
MD. RTE. 28 - NORBECK RD.  
BAUER DR. TO MD. RTE. 609



Maryland Department of Transportation  
State Highway Administration

MONTGOMERY COUNTY  
CENSUS TRACTS

NOT TO SCALE

FIGURE 3

13

One way of evaluating socio-economic characteristics of the area is to examine ways in which the subject population differs from the population of the region.

An examination of the 1970 Census reveals several categories in which the Aspen Hill area differed significantly from the region.

- The family size was larger (approximately four per family);
- The percentage of dwelling units occupied by owners was greater;
- There were more males per 100 females;
- A larger percentage of the population was under 18 years of age;
- A smaller percentage was over 40 years of age;
- The income level was above average; and
- The percentage of non-white was less than average.

An analysis of these characteristics affords a profile of the 1970 Aspen Hill population. The residents were family oriented, as opposed to single adults. The families were young, as evidenced by the large number of small children and by the predominantly young age of the adult population.

The data from which this analysis was made was collected in 1970. Since that time, some changes may have taken place, some of which affect this profile. The addition of the Leisure World retirement community, for example, has had the effect of increasing the average population age somewhat. Census tract 7032.03, in which this community is located, has a 1970 median age of 61.2 years. The large increase in multi-family units will bring in a younger population with a higher family income--more often than not two family members will be working -- and a smaller family size. These characteristics are shown in Table 2.

The median 1969 income for the project area, between \$14,073 and \$22,614, is slightly higher than that for Montgomery County (\$16,710) and the State of Maryland (\$11,063). The percent of families living under the poverty level in 1969, ranging from 1.7% to 5.5% is about the same as the figure for Montgomery County (3.0%), but lower than that for Maryland (7.7%). These figures indicate that the project area is generally one of affluence, at a level slightly higher than that of the county as a whole. This corresponds with the median number of school years completed, ranging from 12.8 to 15.2, compared to 13.8 for Montgomery County and 12.1 for the State of Maryland. Table 3 shows these relationships.

TABLE I  
POPULATION DATA

Data Type/Year	Census Tract's					Planning Areas		Montgomery County	State of Maryland
	7013.02	7013.03	7032.01(a)	7032.02	7032.03	Aspen Hill #27	Olney #23		
Population (Total)-1970	6562	3144	9820	6979	2075	40,400 <sup>5</sup>	9,500 <sup>5</sup>	522,809	3,922,399 <sup>2</sup>
1975/1976 <sup>(c)</sup>	7960('76)	3940('76)	9840('76)	6830('76)	4360('76) <sup>1</sup>	46,000('76) <sup>5</sup>	19,200('76) <sup>5</sup>	572,070('75)	4,121,610('75) <sup>3</sup>
Projections: 1980	+21.3%	+25.3%	-9.0%	-2.1%	+110.2%	47,730 <sup>5</sup>	21,130 <sup>5</sup>	616,500	4,286,500 <sup>3</sup>
Non-White Population (%) 1970/1975	17.1	4.3	2.7	2.5	3.1 <sup>4</sup>	2.6 <sup>(b)2</sup>	-	5.5 <sup>2</sup> /9.8 <sup>3</sup>	18.5 <sup>2</sup> /21.9 <sup>3</sup>
% Population < 18 yrs.	39.5	51.4	49.4	47.8	7.2 <sup>4</sup>	48.7	-	36.2	35.2 <sup>2</sup>
% Population 25-34	11.2	10.9	11.6	13.8	8.2 <sup>4</sup>	12.5	-	13.3	13.4 <sup>2</sup>
% Population 40 <sup>(d)</sup>	34.7	22.9	23.2	23.4	75.5 <sup>4</sup>	23.9	-	34.5	33.9 <sup>2</sup>
% Population 65 ('70)	8.9	1.5	1.7	1.9	42.4 <sup>4</sup>	1.8	-	6.2 <sup>3</sup>	7.6 <sup>2</sup>
% Population 65 (7/75)	-	-	-	-	-	-	-	6.7 <sup>3</sup>	8.3 <sup>3</sup>
Median Age ('70)	26.5	16.4	17.4	19.2	61.2 <sup>4</sup>	19.1	-	27.9	27.1 <sup>2</sup>
Males/100 Females	94.7	100.8	99.1	97.2	67.5 <sup>4</sup>	98.3	-	93.9	95.5 <sup>2</sup>
Persons/Household ('70)	3.80	4.67	4.52	4.19	1.81 <sup>4</sup>	4.37	-	3.30	3.25 <sup>2</sup>

NOTES

- a C.T. 7032.01 is not directly impacted.
- b Next (8) figures for Aspen Hill refer to a smaller area than that indicated above.
- c January 1, 1976, estimated.
- d Population between 40-44 was estimated to be 45% of population 35-44.

SOURCES

- 1 Information Bulletin #18 - Area, Population and Housing Counts, 1970-1975, MNCPPC; January, 1976.
- 2 1970 Census of Population, General Population Characteristics - Md., U.S. Dept. of Commerce, Bureau of the Census; September, 1971.
- 3 Maryland Population Estimates; July 1, 1975, and Projections to 1981, Md. Center for Health Statistics; Dept. of Health and Mental Hygiene; June, 1977.
- 4 1970 Census of Population and Housing, Census Tracts - Washington, D.C. SMSA; U.S. Dept. of Commerce, Bureau of the Census, May, 1972.
- 5 Statistical Profile of Montgomery County, Maryland - 1977 Supplement, Montgomery County Office of Management and Public Policy; July, 1977.

11

TABLE 2  
HOUSING UNIT DATA

Data Type/Year	Census Tracts					Planning Areas		Montgomery County	State of Maryland
	7013.02	7013.03	7032.01 (a)	7032.02	7032.03	Aspen Hill #27	Olney #23		
Housing Units:									
April 1, 1970	1700	742	2180	1684	1177 <sup>3</sup>	10,492 <sup>1</sup>	2480 <sup>1</sup>	161,303 <sup>1</sup>	1,248,564 <sup>2</sup>
January, 1976	2474	1251	2237	1856	2254 <sup>3</sup>	13,638 <sup>(b)</sup>	5419 <sup>1</sup>	196,458 <sup>(b)</sup>	1,390,000 <sup>4</sup> (7/75)
Change, 1970-1976:									
Number	774	509	57	172	1077 <sup>3</sup>	3,146 <sup>1</sup>	2939 <sup>1</sup>	35,155 <sup>1</sup>	141,436 <sup>4</sup>
%	45.5	68.6	2.6	10.2	91.5 <sup>3</sup>	30.0 <sup>1</sup>	118.5 <sup>1</sup>	21.8 <sup>1</sup>	11.3 <sup>4</sup>
% of Owner-Occupied Housing Units - 1970	76.3	89.8	95.7	86.7	77.3 <sup>3</sup>	-	-	61.4 <sup>2</sup>	58.7 <sup>2</sup>

NOTES

- a C.T. 7032.01 is not directly impacted.  
b April, 1976 figures.

SOURCES

- 1 Statistical Profile of Montgomery County, Maryland - 1977 Supplement, Mont. County Office of Management and Public Policy; July, 1977.  
2 Md. Population and Housing Statistics: 1970 Census, Md. Dept. of State Planning; August, 1971.  
3 Information Bulletin #18 - Area, Population and Housing Counts, 1970-1975, MNCPPC; January, 1976.  
4 Earl Cole, Area Economist, Federal Dept. of Housing and Urban Development, estimate (September, 1977).

### 3. Natural Environmental Features

#### Topography:

The topography of the project area varies from level to moderately sloping. The entire area is within uplands of Piedmont Plateau Physiographic Province. Approximately surface elevations above sea level range from 360 to 500 feet. Natural ground slopes in this area are relatively flat and generally within a range of 0% to 15%.

#### Geology:

This area consists primarily of Boulder Gneiss and Lower Pelitic Schist and to a lesser extent Norbeck Quartz Diorite. Depths to rock vary from 3 to 10 feet. Types of available rock include gneiss, quartzite, various schists including mica schist, granitic schist, and granitized schist. Blasting may be necessary if significant excavations are required; however, blasting is not anticipated to be required and this is not considered to be a problem.

#### Soils:

Soil textures throughout the area are predominantly silt loams. Soil stability in depressions and flood plains ranges from poor to fair, but generally fair to good in upper slope and upland areas. Susceptibility to frost action varies from moderate to high in depressions and floodplains, while low to moderate in upper slope and upland areas. Water erosion hazard is moderate in depressions and flood plains but ranges from moderate to high in upper slope and upland areas. Wind erosion hazard, however, is low to moderate throughout the year.

#### Subsurface and Surface Waters:

Ground Water depths to seasonally high water table (usually occurring in early spring) vary from 0.0 to 3.0 feet in depressions and flood plains and 20.0 feet or more in upper slope and upland areas.

There are three small tributaries of the North Branch of Rock Creek which drain the study area above Lake Norbeck and one which drains to the North Branch below Lake Norbeck. All of these are intermittent near the area under study. The proposed improvement barely touches the beginning of one of the intermittent streams just east of Carrollton Road. Due to the intense residential development, the intermittent stream becomes a closed storm drainage system under the Flower Valley subdivision.



TABLE 3  
INCOME AND EDUCATION DATA

Data Type/Year	Census Tracts					Planning Areas		Montgomery County	State of Maryland
	7013.02	7013.03	7032.01 (a)	7032.02	7032.03	Aspen Hill #27	Olney #23		
Median Income Families - 1969	\$15,794	\$22,614	\$18,871	\$19,780	\$14,073 <sup>2</sup>	\$19,244 <sup>3</sup>	-	\$16,710 <sup>3</sup> 27,600 <sup>3(b)</sup>	\$11,063 <sup>1</sup>
% of Families Under Poverty Level - 1969	5.5	2.6	1.7	2.5	4.5 <sup>2</sup>	2.0 <sup>3</sup>	-	3.0 <sup>3</sup>	7.7 <sup>1</sup>
Median School Years Completed (1970)	12.8	15.2	13.7	15.1	13.1 <sup>2</sup>	14.6 <sup>1(c)</sup>	-	13.8	13.1 <sup>1</sup>

NOTES

- a C.T. 7032.01 is not directly impacted.
- b 1976 figure
- c Refers to a smaller area than that indicated above.

SOURCES

- 1 1970 Census of Population; General, Social and Economic Characteristics - Md., U.S. Dept. of Commerce, Bureau of the Census; March, 1972.
- 2 1970 Census of Population and Housing; Census Tracts - Washington, D.C. SMSA; U.S. Dept. of Commerce, Bureau of the Census; May, 1972.
- 3 Statistical Profile of Montgomery County, Maryland - 1977 Supplement, Montgomery County Office of Management and Public Policy; July, 1977.

Although the boundaries of Rock Creek Park appear to have protected Lake Norbeck and the immediate stream valley from the effects of area urbanization, rapid residential development has taken place over much of the watershed of the four tributaries. The watersheds of the tributaries are small, accounting for the intermittent character of slight sizes of the streams and for their free flowing nature. The project corridor lies entirely in upper slope and upland areas. Major water and drainage problems are not anticipated in the proposed project area. There are no wetlands or floodplains, within the project area.

Vegetation:

Vegetation is well established in this area. Between Bauer Drive and Maryland Route 115 extensive residential development has taken place on either side of the project. The lawns and open spaces with grass and some oaks, pines, hickories, and tulip trees on the whole are well maintained.

There are two large, old trees, one 50" oak and another 50" poplar, both located on the north side of the existing Route 28 approximately 400' east of Emory Lane.

For the portion of proposed relocation of Maryland Route 28 east of Maryland Route 115, due to the sparingly scattered developments vegetation is much better established as evidenced by hedgerow communities of locust, honeysuckle, wild cherries and blackberry bushes. However, throughout the entire project area, there is no evidence of rare vegetation or unique ecological habitats.

Wildlife:

With exception of the area near the Church of Christ at Manor Woods, the Saint Patrick's Catholic Church and east of Maryland Route 115, there is little sign of wildlife primarily owing to extensive residential developments. However, it was learned from some local residents that pheasants, squirrels, and several species of field mice and thrushes have been found especially in the area east of Maryland Route 115. No endangered wildlife species are known to inhabit the project area.

#### 4. Land Use/Planning

In the project corridor (Figure 4) under study, there has been extensive low - medium density residential developments for middle - upper middle income group on either side between Bauer Drive and Maryland Route 115. On the north side, Manor Lake, Flower Valley, and Norbeck Manor are all relatively new subdivision developments. With the exception of Flower Valley, service roads are provided along Maryland Route 28. On the south side, a service road is also provided for Manor Woods subdivision between Bauer Drive and Bel Pre Road. From Bel-Pre Road eastward to Rosecroft Road, relatively old large homes on large lots prevail on Manor Park subdivision wherein no service roads are provided along Maryland Route 28.

There are two churches within the project corridor. The Church of Christ at Manor Woods is located on the south side and about 800 feet east from Bauer Drive. St. Patrick's Catholic Church is located at the northwest corner of Maryland Route 28 and 115.

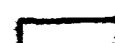

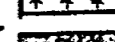
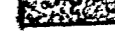





There are no existing or planned school sites which have frontage on Maryland Route 28. The nearest schools, Earle B. Wood Junior High, Lucy V. Barnsley, North Lake, and Flower Valley Elementary Schools, are all accessible by primary residential streets which interconnect to Maryland Route 28 and other arteries.

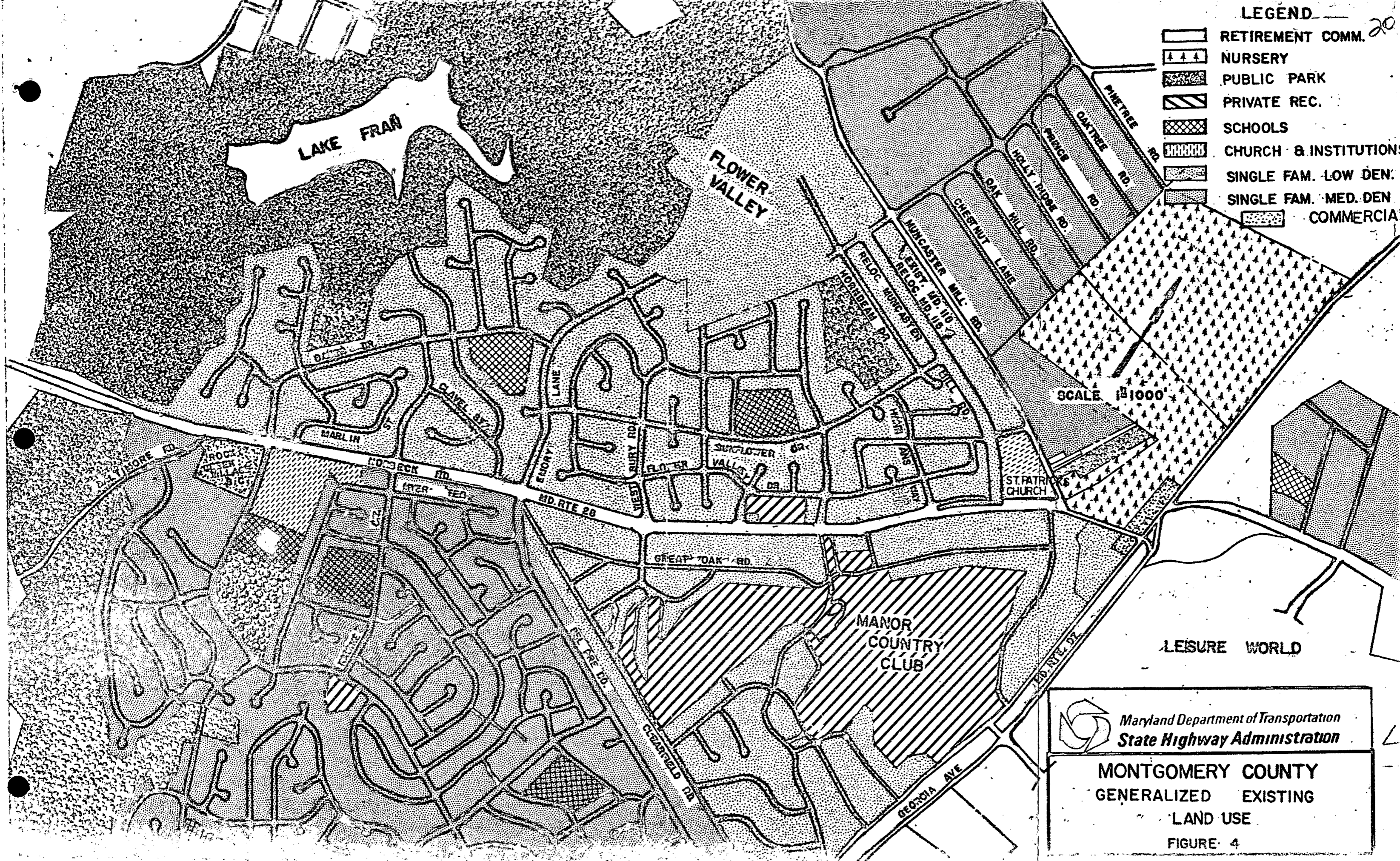
There are no hospitals or medical facilities located within the project area. However, the Montgomery General Hospital is situated between Olney and Sandy Spring, about three miles to the north.

Currently, there are four (4) fire stations existing or under construction in the area. One, Station #21, is situated at the corner of Parkland Drive and Viers Mill Road, approximately three (3) miles away. The Sandy Spring Station #40, is located at 16911 Georgia Avenue (Maryland 97), north of Maryland 609. The Kensington-Glenmont Station, #18, located at 12251 Georgia Avenue, is south of Maryland 28. The Kensington Station #25, is currently under construction on Georgia Avenue, south of Maryland 28 also.


A branch library, located on Aspen Hill Road, provides adequate service to area residents.

LEGEND

-  RETIREMENT COMM.
-  NURSERY
-  PUBLIC PARK
-  PRIVATE REC.
-  SCHOOLS
-  CHURCH & INSTITUTION
-  SINGLE FAM. LOW DEN.
-  SINGLE FAM. MED. DEN.
-  COMMERCIAL



SCALE 1:1000

 Maryland Department of Transportation  
 State Highway Administration

**MONTGOMERY COUNTY  
 GENERALIZED EXISTING  
 LAND USE**

FIGURE 4

A Montgomery County sponsored project known as Community Facilities/Housing is currently operating at the southeast corner of Bauer Drive and Maryland Route 28.

From Maryland Route 115 eastward, there are many vacant lands and some scattered agricultural-residential developments. However, six commercial businesses are found on the west side of Maryland Route 97, in the vicinity of the so-called "dog-leg" intersection between Maryland Routes 28 and 609. The six commercial businesses consist of one nursery, one service station, one hardware and farm supply store, one auto wreckage yard, one auto repair shop, and one cat breeding farm. Also, there is a mobile produce stand. In addition, a second, part-time, auto-repair shop is located east of Maryland 97 and north of Maryland 609. They constitute the small community known as Norbeck, with an estimated total employment of 30 people.

South from the eastern terminus of the proposed improvement is a retirement community known as Rossmore Leisure World which occupies an area of approximately 920 acres.

Through the dedication process and the activities of the Maryland National Capital Park and Planning Commission, some land has been set aside for highway use along Maryland Route 28 between Bauer Drive and Maryland Route 115. Also, in anticipation of a potential interchange between Maryland Routes 97 and 28, the State Highway Administration in 1965 acquired approximately 13 acres of land from Rossmore Leisure World, located at the southeast corner of Maryland Routes 97 and 609.

The proposed project is included in the Metropolitan Washington Council of Government Transportation Improvement Program. This program is consistent with the Council of Governments Long Range Plan for the National Capital Region. In addition, the project is consistent with the plans of the Maryland National Capital Park and Planning Commission. Projected land use does not differ significantly from existing land uses along Maryland Route 28. However, existing land uses and activity patterns will continue to develop.

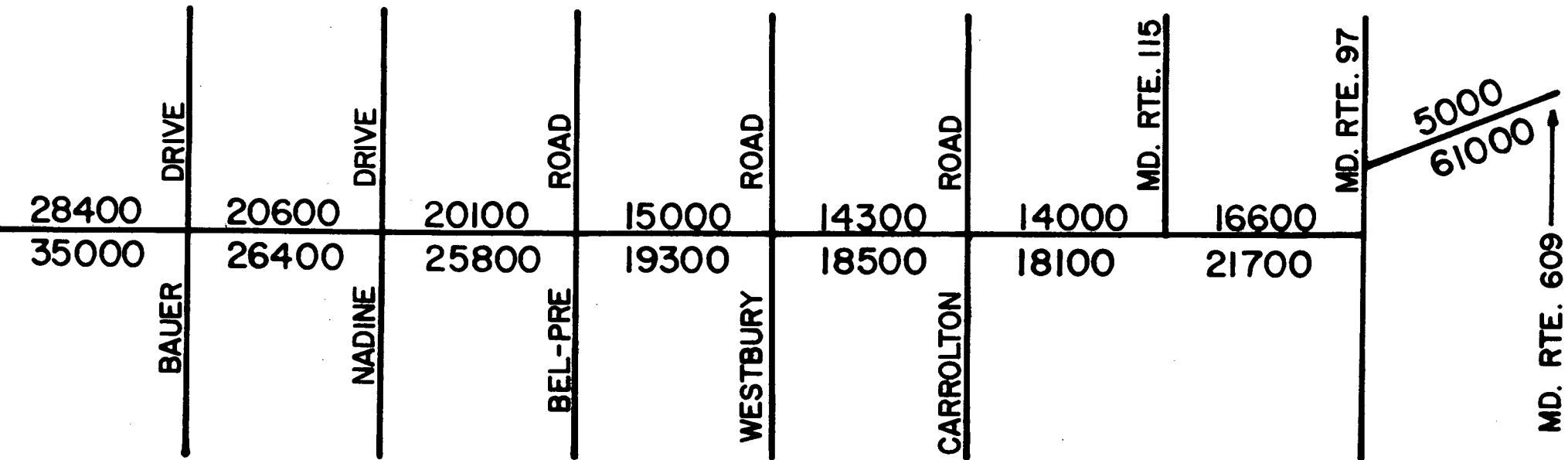
Based on the information furnished from the utility companies and by inspection at the project site, there is no major conflict with either the existing or the proposed utility facilities.

5. Traffic Data:

The projected annual average daily traffic and turning movements for the years 1982, and 2002 are displayed in Figures 5 and 5a. Other pertinent traffic data for Maryland Route 28 between Bauer Drive and Maryland Route 97 are shown below:

ADT	31,350 1982
	57,550 2002
DHV(Design Hourly Volume)	9% of ADT
D.D.(Directional Distribution)	61% of DHV
Truck Traffic (% of ADT)	7%
Truck Traffic (% of DHV)	4%

The above mentioned traffic data was developed by the Maryland State Highway Administration Traffic Planning Section.



**NO-BUILD ALTERNATE**

1982 ADT  
2002 ADT



**Maryland Department of Transportation**  
**State Highway Administration**

**TRAFFIC VOLUME MAP**

**ADT VOLUMES**

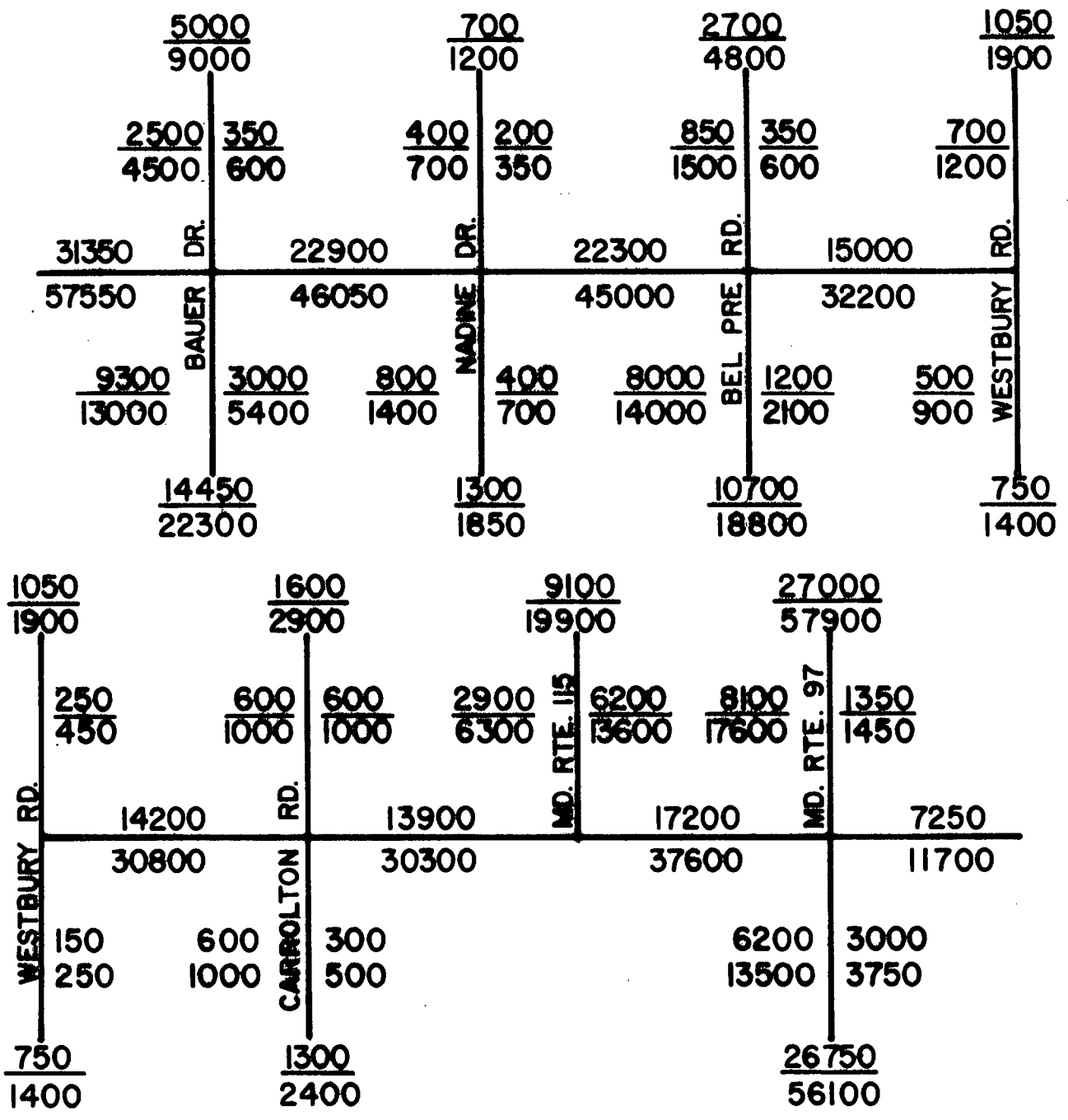
**MD. RTE. 28**

(BAUER DR. TO MD. RTE. 97)

**FIGURE 5**

23





1982 ADT  
2002 ADT



Maryland Department of Transportation  
State Highway Administration

SOURCE:  
STATE HIGHWAY ADMIN.

**TRAFFIC VOLUME MAP**  
**MD. RTE. 28**  
**(BAUER DR. TO MD. RTE. 97)**  
**FIGURE 5a**



B. Description of the Alternates

Three alternates were studied for this project, including Alternates 1, 2, and the No-Build Alternate.

1. Alternate 2 (The Selected Alternate)

Alternate 2 is a 68 foot closed urban section with two (2) 26 foot roadways and a 16 foot raised median. The roadway plan is shown in Figures 6 and 6A. This alternate was selected to provide a safer facility for Maryland Route 28. With this Alternate, it will be possible to separate opposing traffic, and left turns will be limited to designated points. The typical roadway section is shown in Figure 9 and the profile is shown in Figure 10.

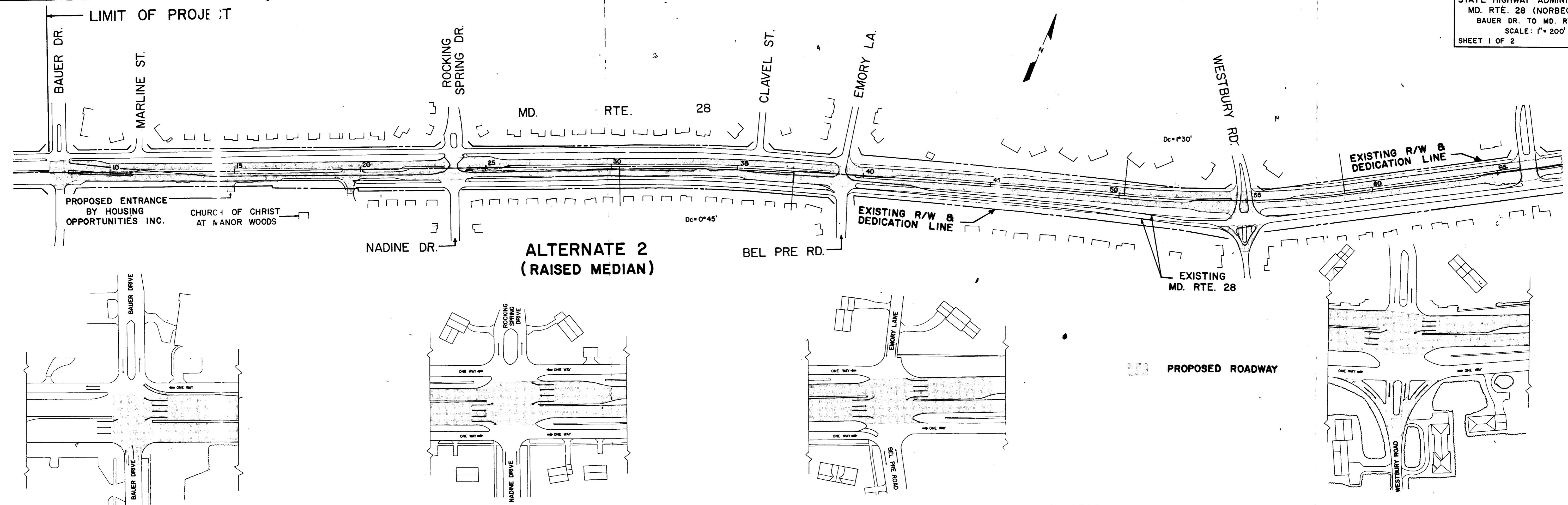
At the intersection of Maryland Routes 28 and 97, Intersection Alternate 2A has been selected (see Figure 6b). With intersection Alternate 2A, from Maryland Route 115 eastward, Maryland Route 28 would be shifted approximately 100 feet northward. However, the connection to Maryland Route 97, with this alignment, will be made at the same location as the present intersection. This intersection alternate is shown in Figure 8 and the typical roadway section is shown on Figure 9A. The intersection with Maryland Route 115 is shown on Figure 7.

Intersection alternate 2A, was developed in response to Public Hearing comments to preserve established economic activities as well to avoid the taking of property from historic sites.

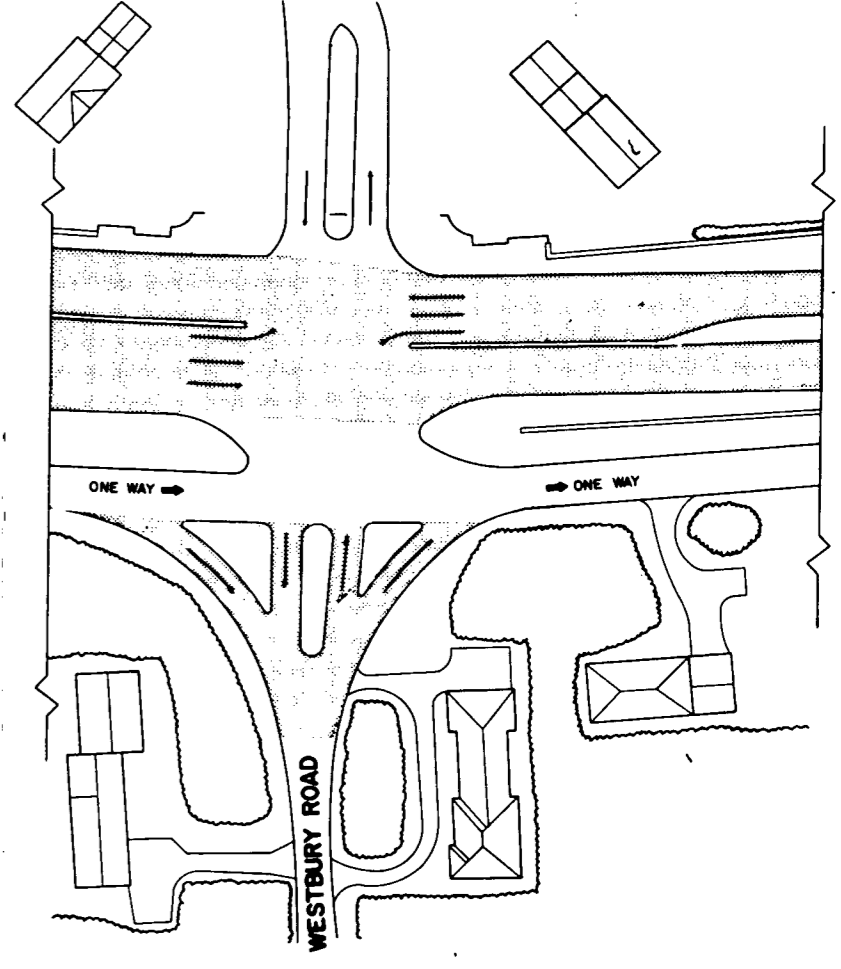
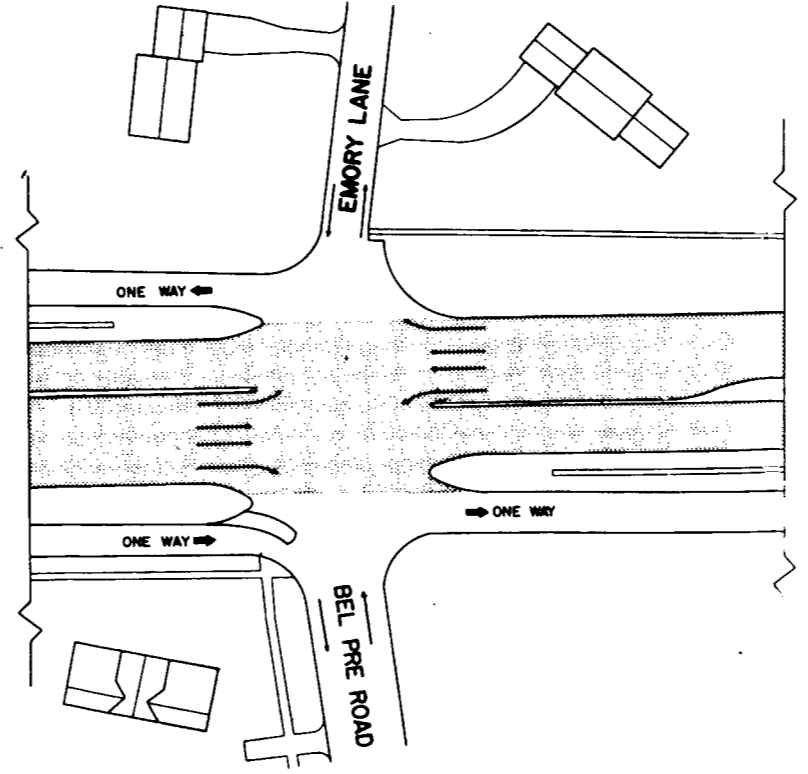
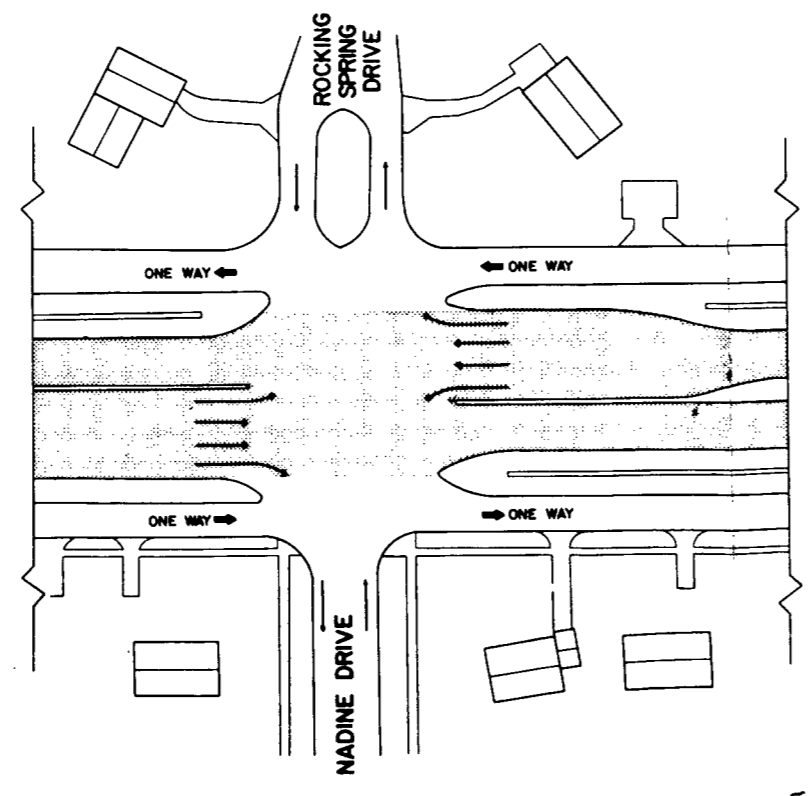
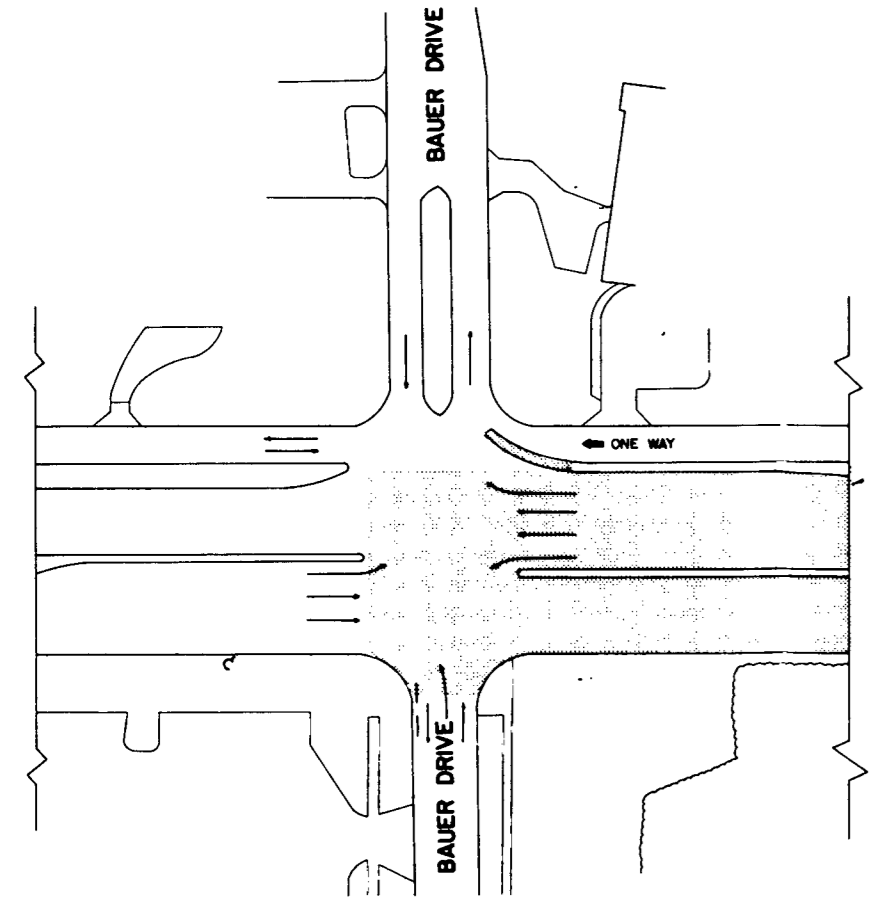
The proposed relocation of the Maryland Route 115 intersection is currently under study, and this study is scheduled for completion in the Spring of 1980.

Service Roads

The service road system will be revised from Bauer Drive to Maryland Route 115. The existing service road on both sides is 20 feet wide, and the proposed service road system will also be 20 feet wide. Curb and gutter will be provided on both sides of the service road.



**ALTERNATE 2  
 (RAISED MEDIAN)**



PROPOSED ENTRANCE  
 BY HOUSING  
 OPPORTUNITIES INC.  
 CHURCH OF CHRIST  
 AT MANOR WOODS

EXISTING  
 MD. RTE. 28

EXISTING R/W &  
 DEDICATION LINE

EXISTING R/W &  
 DEDICATION LINE

PROPOSED ROADWAY

Dc = 0°45'

Dc = 1°30'

LIMIT OF PROJECT

BAUER DR.

MARLINE ST.

ROCKING  
 SPRING DR.

MD. RTE. 28

CLAVEL ST.

EMORY LA.

WESTBURY RD.

NADINE DR.

BEL PRE RD.

BAUER DRIVE

BAUER DRIVE

ROCKING  
 SPRING  
 DRIVE

NADINE  
 DRIVE

EMORY  
 LANE

BEL  
 PRE  
 ROAD

WESTBURY  
 ROAD

ONE WAY

ONE WAY

ONE WAY

ONE WAY

ONE WAY

ONE WAY

ONE WAY

ONE WAY

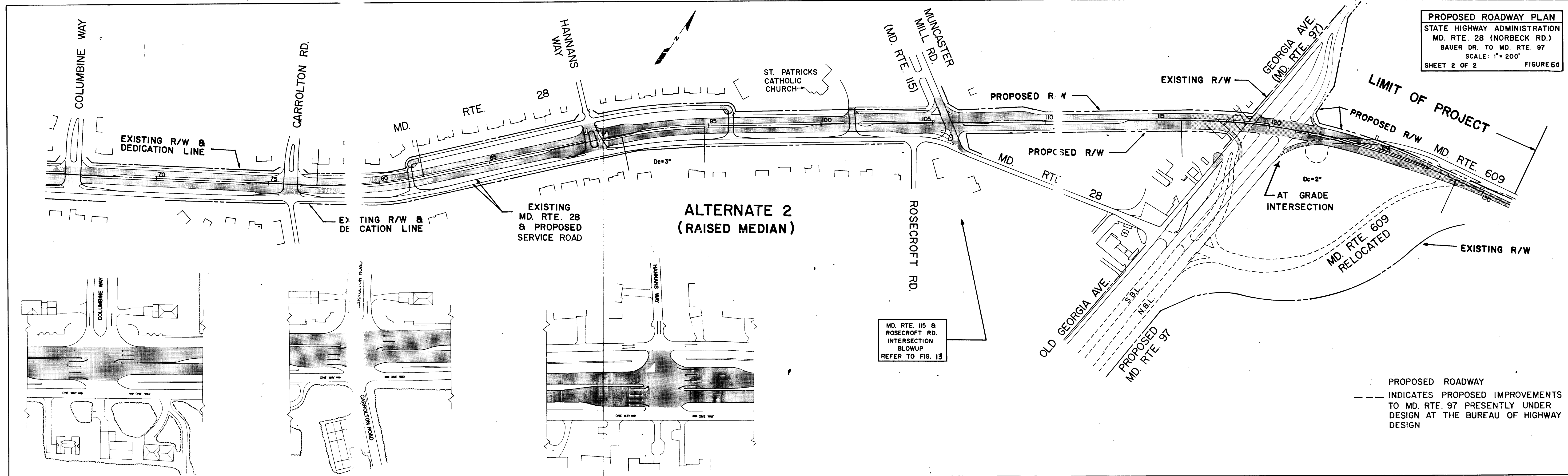
ONE WAY

ONE WAY

ONE WAY

ONE WAY

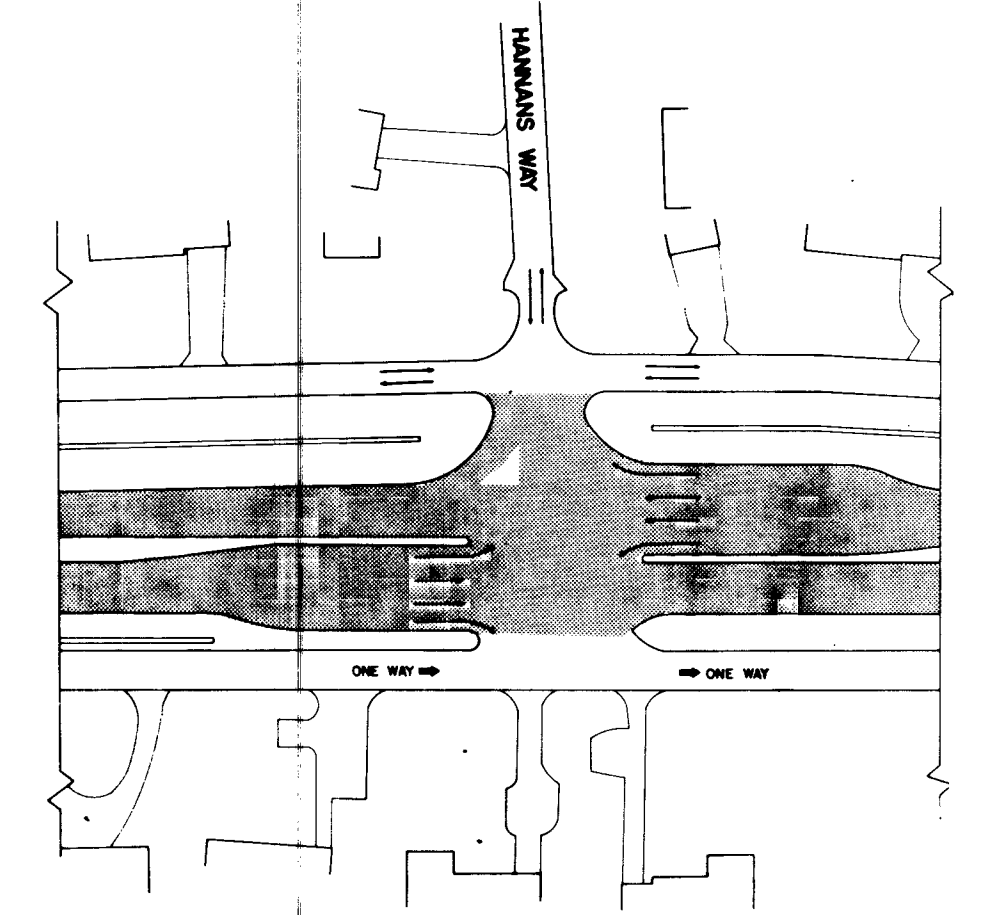
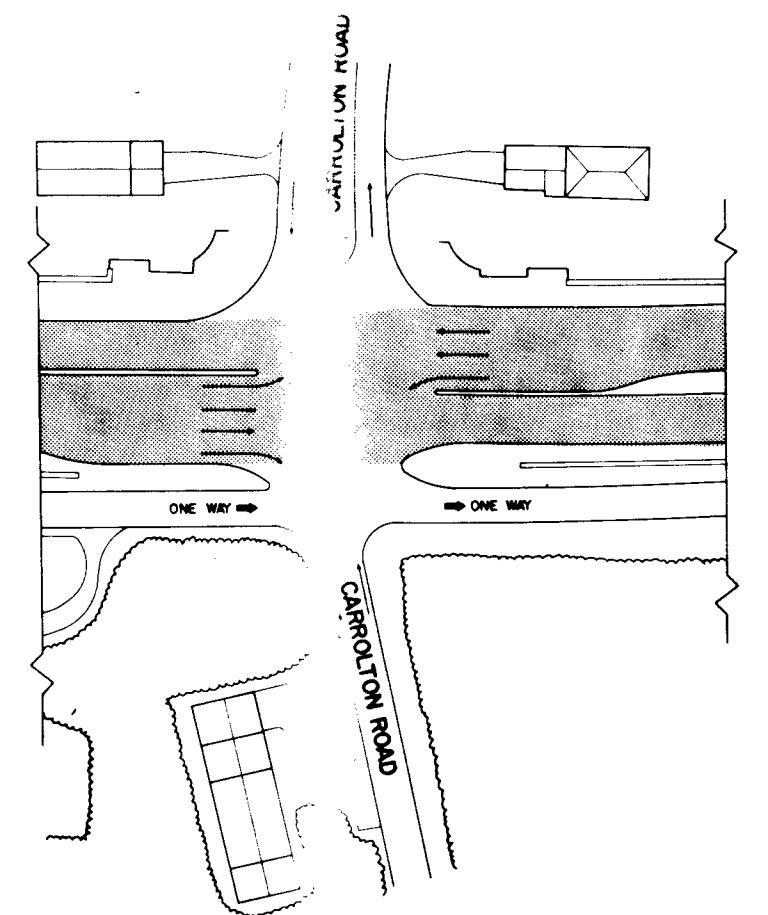
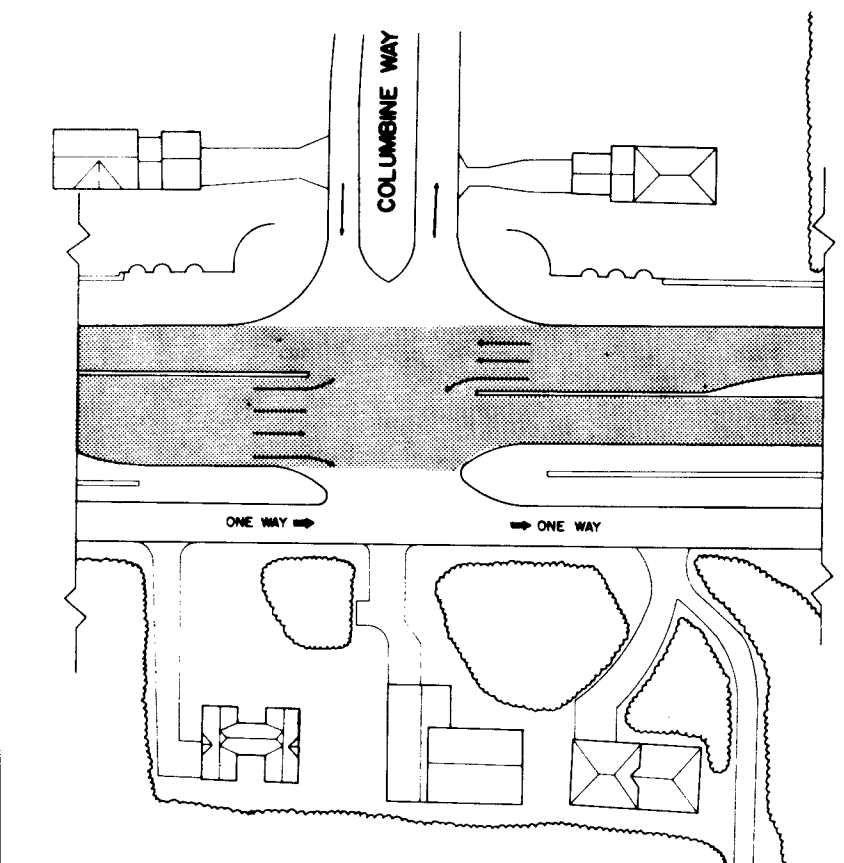
**PROPOSED ROADWAY PLAN**  
 STATE HIGHWAY ADMINISTRATION  
 MD. RTE. 28 (NORBECK RD.)  
 BAUER DR. TO MD. RTE. 97  
 SCALE: 1" = 200'  
 SHEET 2 OF 2      FIGURE 6d



**ALTERNATE 2  
 (RAISED MEDIAN)**

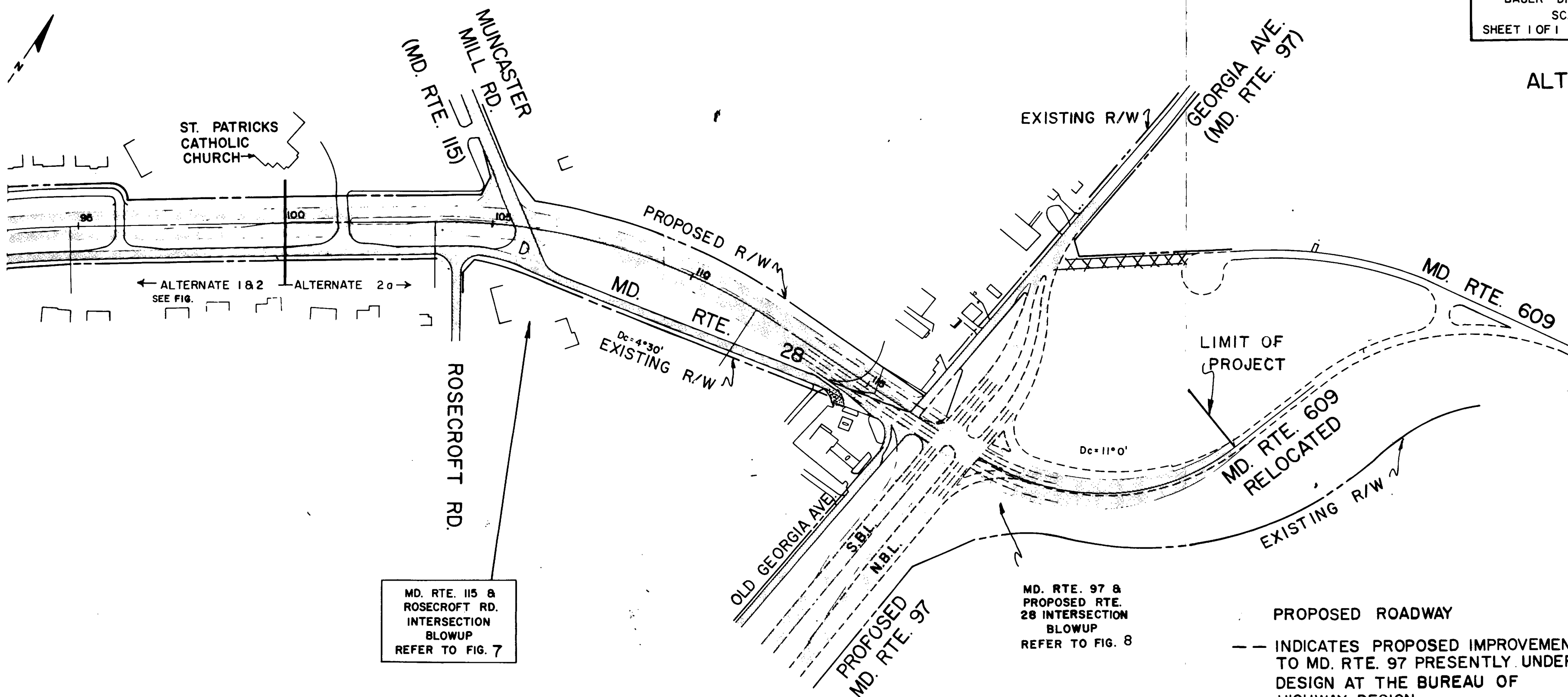
MD. RTE. 115 &  
 ROSECROFT RD.  
 INTERSECTION  
 BLOWUP  
 REFER TO FIG. 13

PROPOSED ROADWAY  
 --- INDICATES PROPOSED IMPROVEMENTS  
 TO MD. RTE. 97 PRESENTLY UNDER  
 DESIGN AT THE BUREAU OF HIGHWAY  
 DESIGN



PROPOSED ROADWAY PLAN  
 STATE HIGHWAY ADMINISTRATION  
 MD. RTE. 28 (NORBECK RD.)  
 BAUER DR. TO MD. RTE. 97  
 SCALE: 1" = 200'  
 SHEET 1 OF 1      FIGURE 6 b

ALTERNATE 2a



← ALTERNATE 1 & 2      ALTERNATE 2a →  
 SEE FIG.

MD. RTE. 115 &  
 ROSECROFT RD.  
 INTERSECTION  
 BLOWUP  
 REFER TO FIG. 7

MD. RTE. 97 &  
 PROPOSED RTE.  
 28 INTERSECTION  
 BLOWUP  
 REFER TO FIG. 8

PROPOSED ROADWAY  
 --- INDICATES PROPOSED IMPROVEMENTS  
 TO MD. RTE. 97 PRESENTLY UNDER  
 DESIGN AT THE BUREAU OF  
 HIGHWAY DESIGN

Dc = 4°30'  
 EXISTING R/W

Dc = 11°0'

LIMIT OF PROJECT

MD. RTE. 609  
 RELOCATED

PROPOSED  
 MD. RTE. 97  
 SBL  
 NBL

OLD GEORGIA AVE.

MUNCASTER  
 MILL RD.  
 (MD. RTE. 115)

GEORGIA AVE.  
 (MD. RTE. 97)

ST. PATRICKS  
 CATHOLIC  
 CHURCH

ROSECROFT RD.

PROPOSED R/W  
 MD. RTE. 28

EXISTING R/W

EXISTING R/W

MD. RTE. 609



Maryland Department of Transportation  
State Highway Administration

MD. RTE. 28

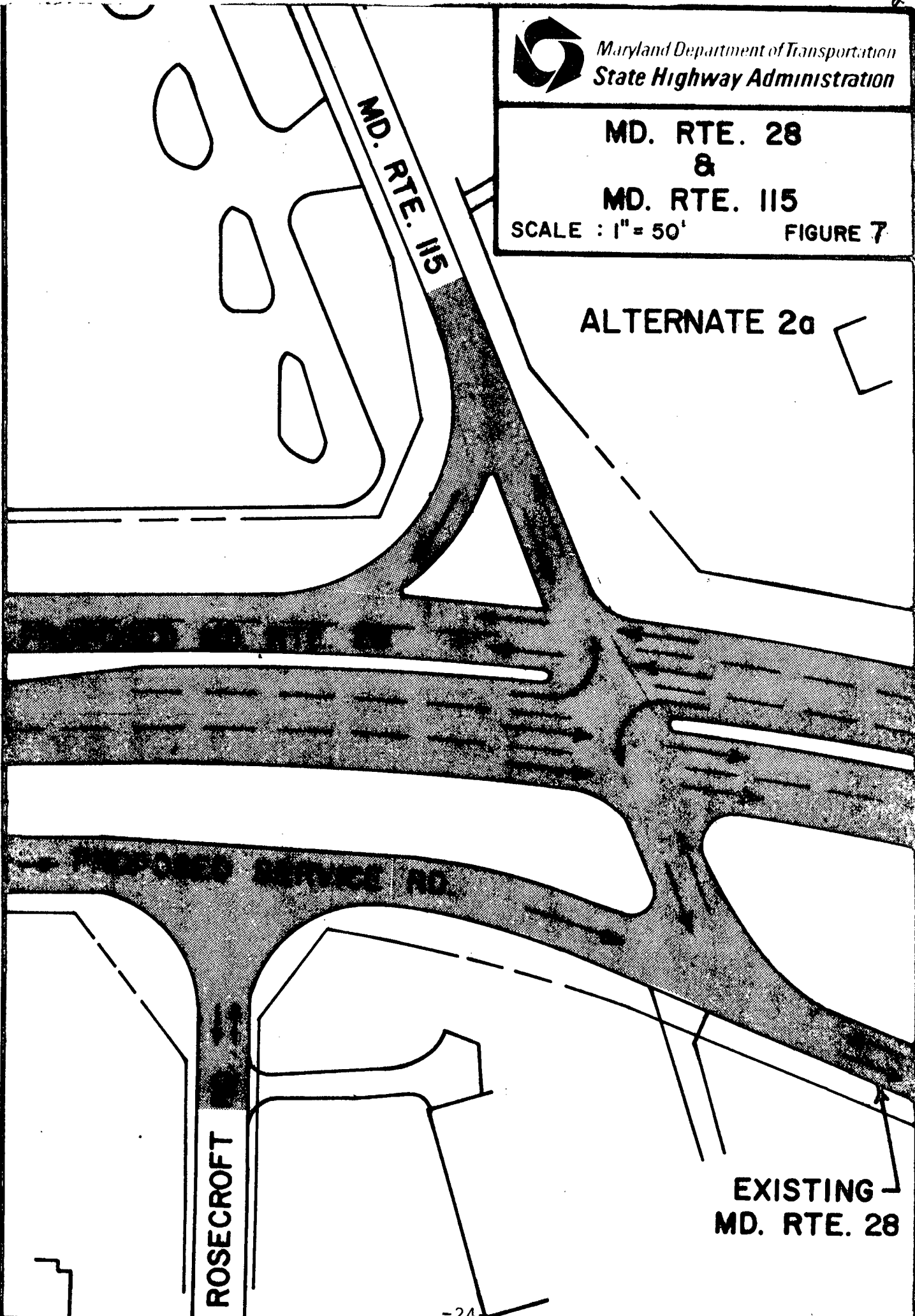
&

MD. RTE. 115

SCALE : 1" = 50'

FIGURE 7

ALTERNATE 2a



PROPOSED SERVICE RD.

ROSECROFT

EXISTING  
MD. RTE. 28



AT GRADE INTERSECTION  
MD. RTE. 28  
&  
MD. RTE. 97  
SCALE: 1" = 50' FIGURE 8

BLDG.

DWLG.

DWLG.

WHITE'S  
HARDWARE  
STORE

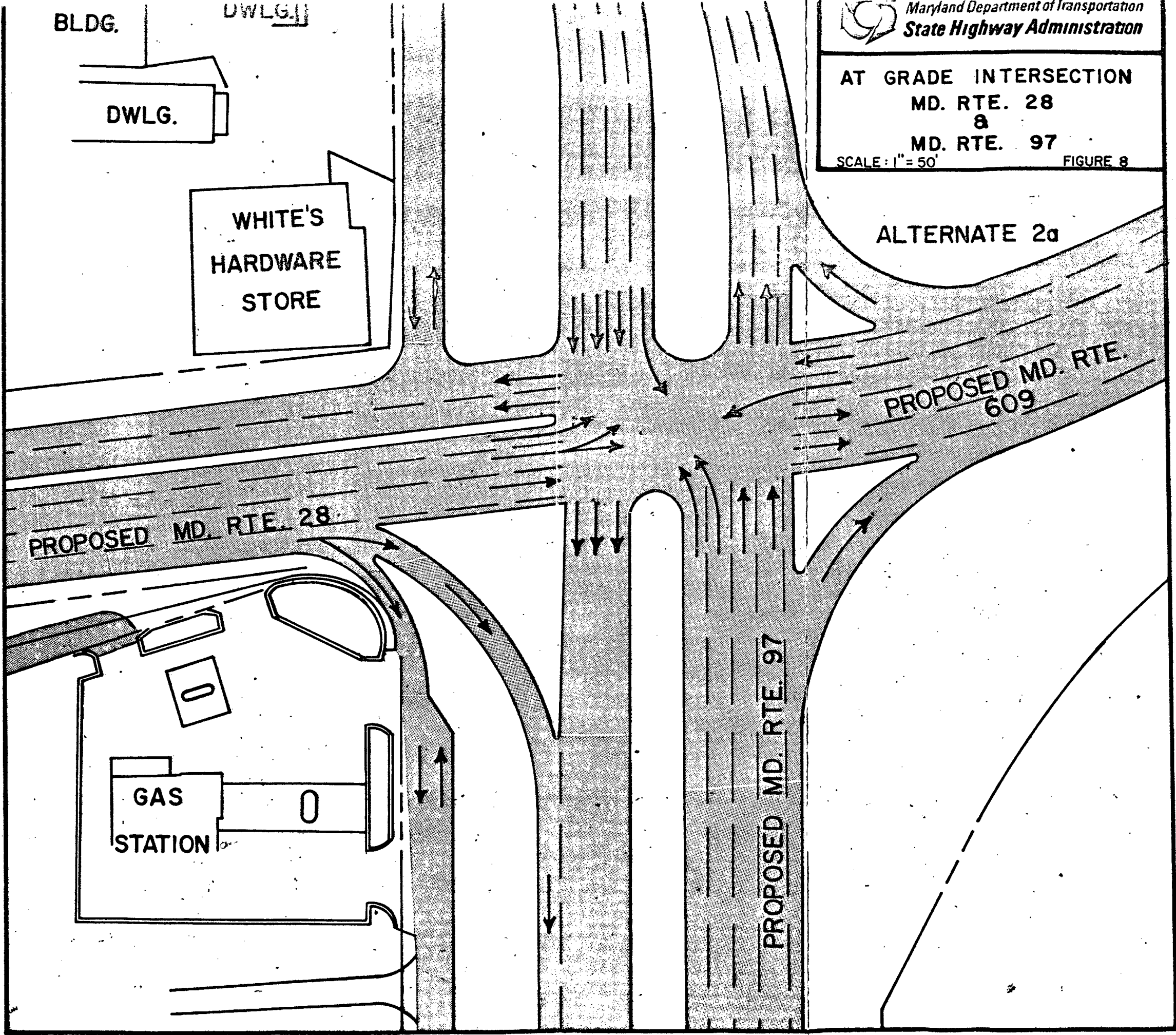
ALTERNATE 2a

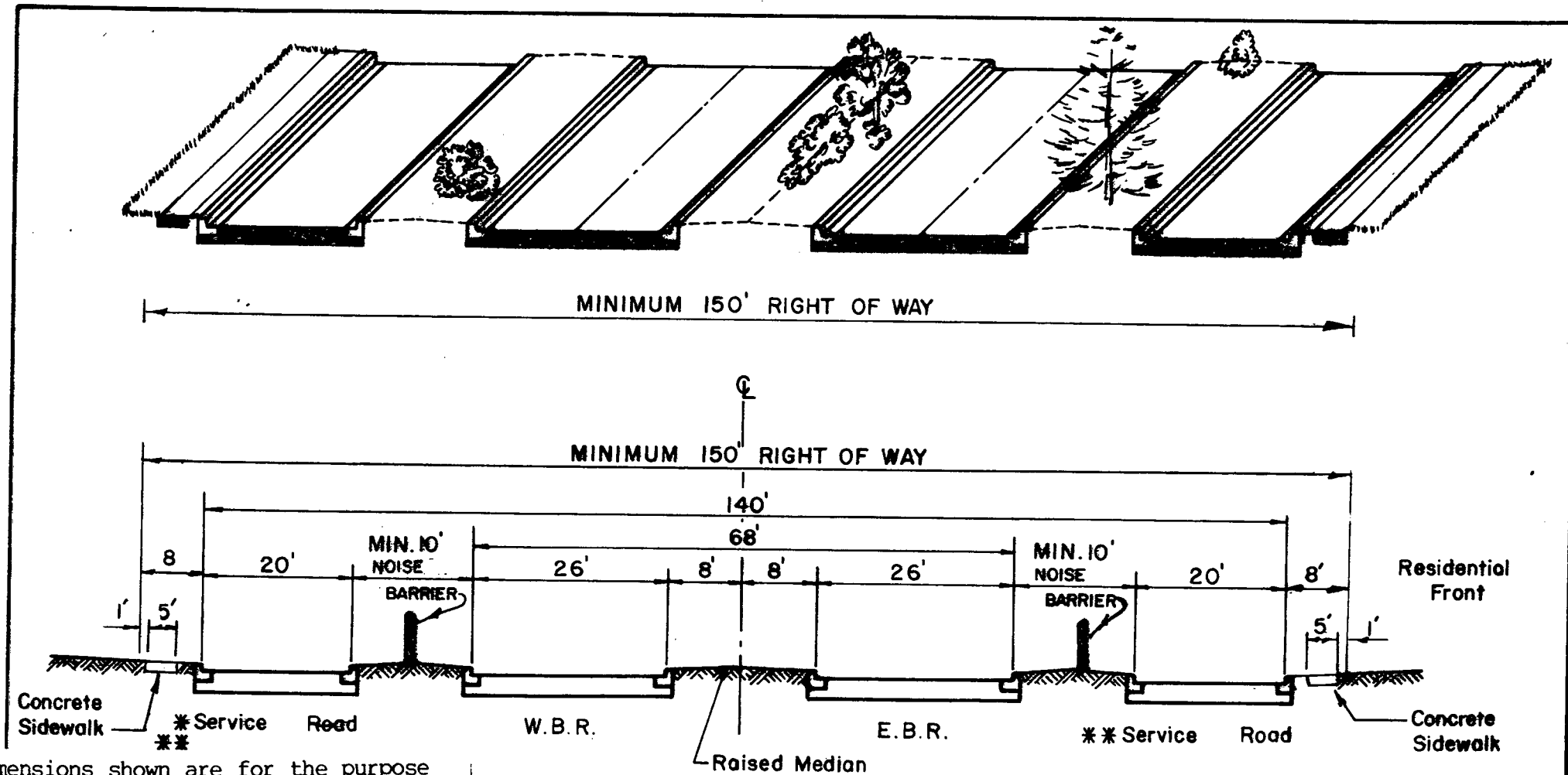
PROPOSED MD. RTE.  
609

PROPOSED MD. RTE. 28

PROPOSED MD. RTE. 97

GAS  
STATION



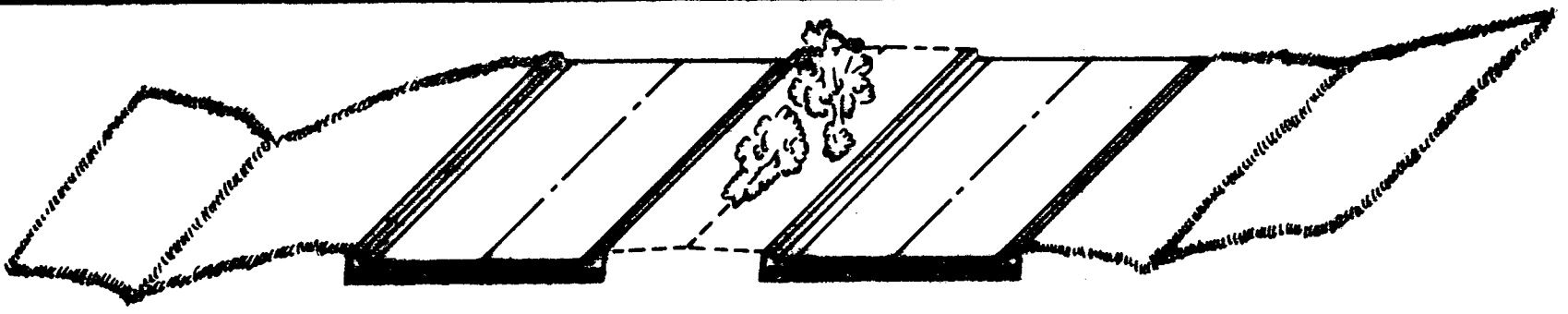


Dimensions shown are for the purpose of determining cost estimates and environmental impacts, and are subject to change during the final design phase.

**TYPICAL RAISED MEDIAN SECTION  
ALTERNATE 2**

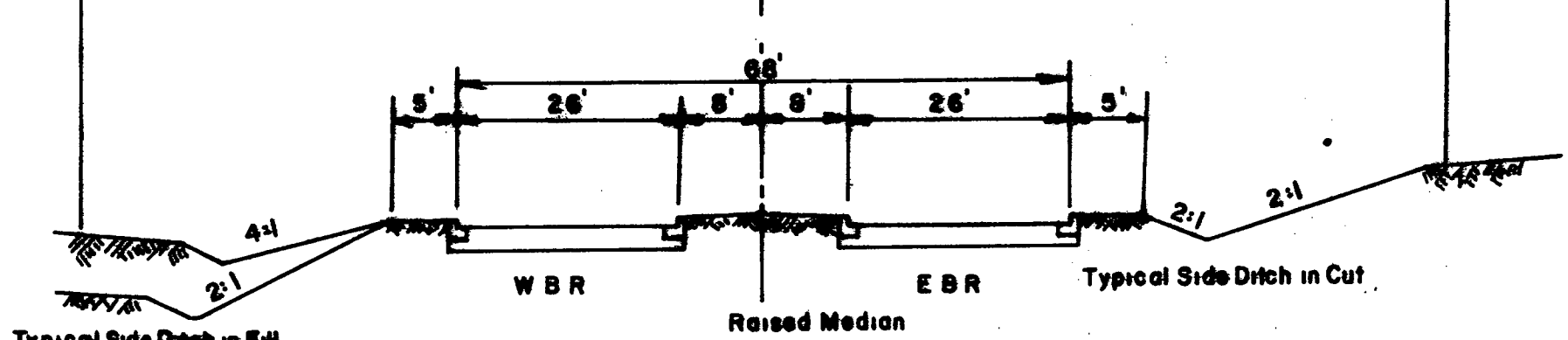
- \* SERVICE ROAD NOT CONTINUOUS THROUGHOUT PROJECT
- \*\* WHERE THE SERVICE ROAD EXISTS IT WILL BE USED AS A BIKEWAY, AND WHERE IT DOES NOT EXIST A 12' COMBINATION BIKE/WALK WAY WILL BE PROVIDED.

**TYPICAL ROADWAY SECTION**  
 STATE HIGHWAY ADMINISTRATION  
 MD. RTE. 28 (BAUER DR. TO MD. RTE. 113)  
 NOT TO SCALE FIGURE 9



MINIMUM 120' RIGHT OF WAY

MINIMUM 120' RIGHT OF WAY

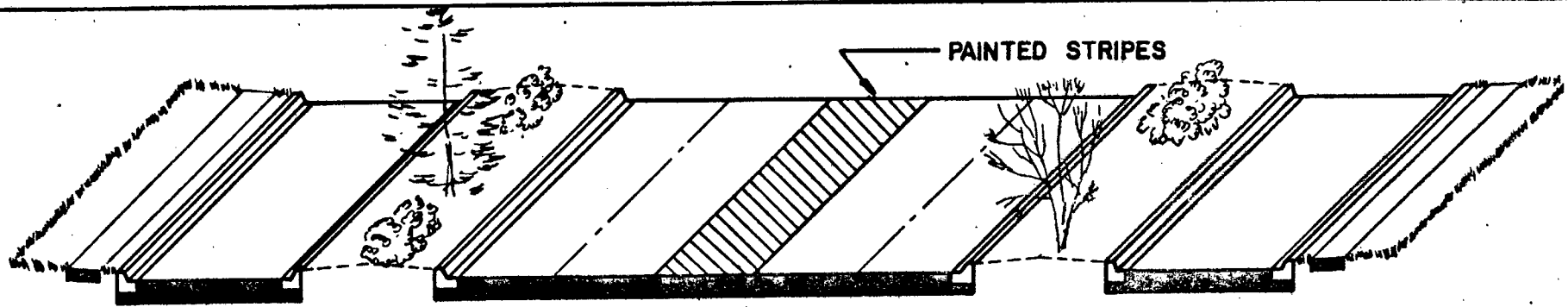


**TYPICAL RAISED MEDIAN SECTION  
ALTERNATE 2-A**

**TYPICAL ROADWAY SECTION  
STATE HIGHWAY ADMINISTRATION  
MD. RTE. 28 (MD. RTE. 115 TO MD. RTE. 609)  
NOT TO SCALE FIGURE 9a**

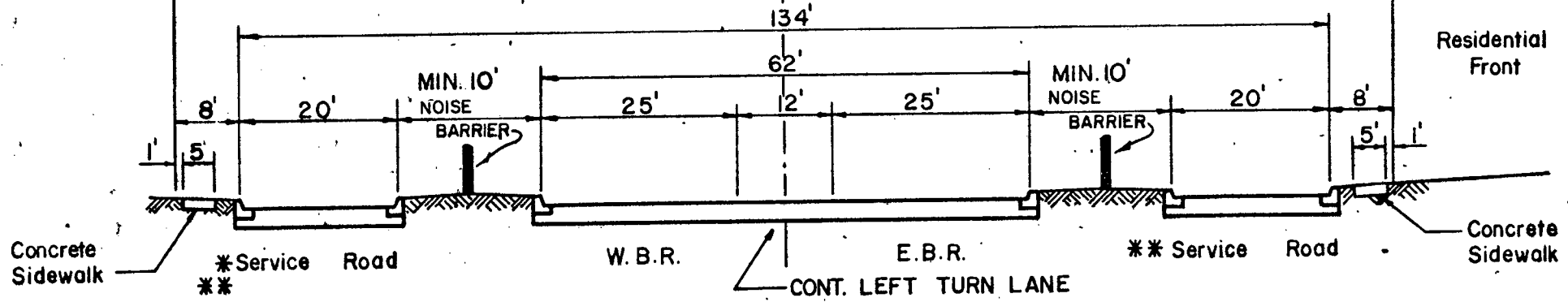
Dimensions shown are for the purpose of determining cost estimates and environmental impacts, and are subject to change during the final design phase.





MINIMUM 150' RIGHT OF WAY

MINIMUM 150' RIGHT OF WAY

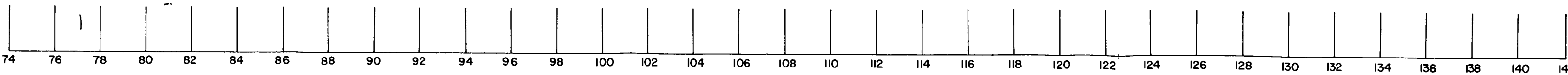
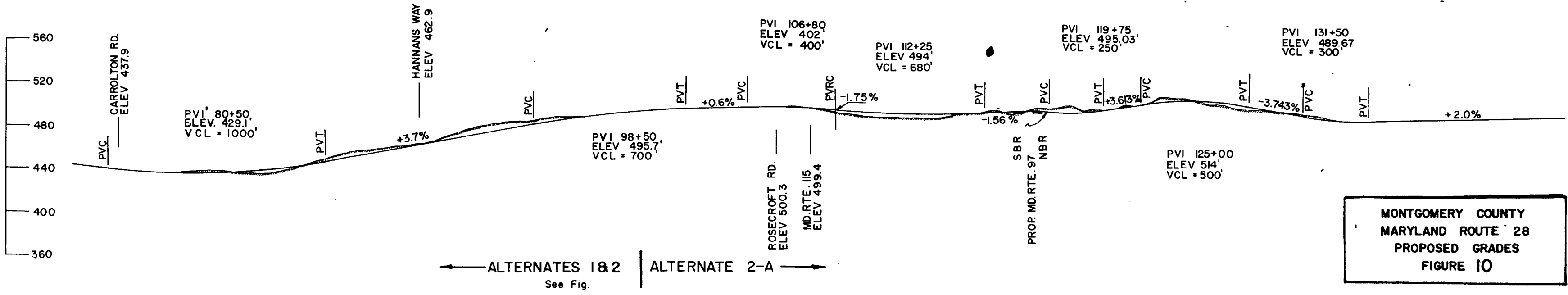
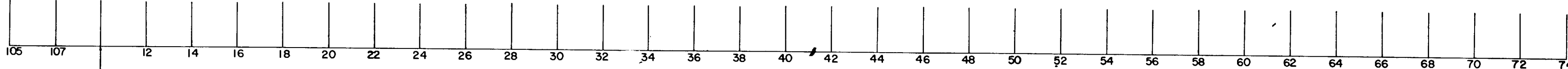
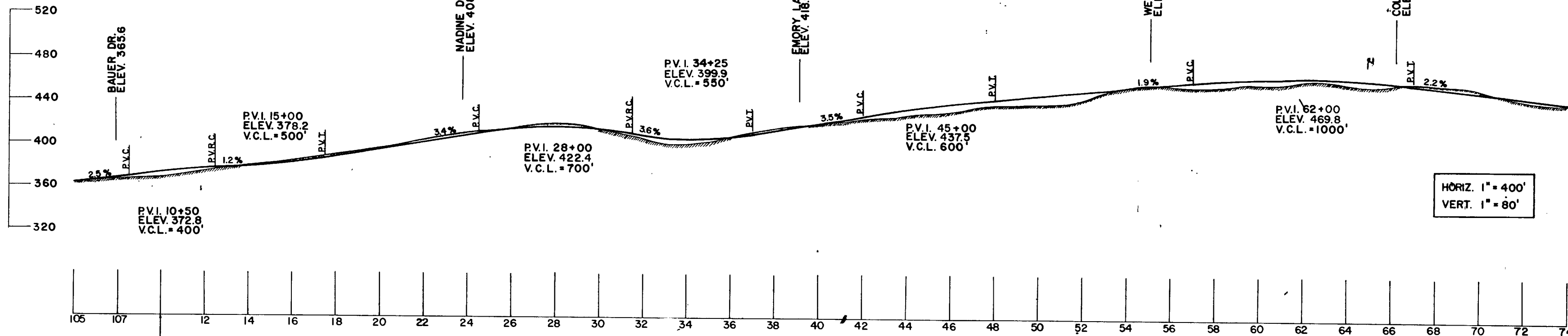


TYPICAL OPEN MEDIAN SECTION  
ALTERNATE 1

- \* SERVICE ROAD NOT CONTINUOUS THROUGHOUT PROJECT
- \*\* WHERE THE SERVICE ROAD EXISTS IT WILL BE USED AS A BIKEWAY, AND WHERE IT DOES NOT EXIST A 12' COMBINATION BIKE/WALK WAY WILL BE PROVIDED.

TYPICAL ROADWAY SECTION  
STATE HIGHWAY ADMINISTRATION,  
MD. RTE. 28 (BAUER DR. TO MD. RTE. 115)  
NOT TO SCALE FIGURE 9B

33



MARYLAND ROUTE 28 (ALTERNATE 2-A)



The south side service road will be made continuous from approximately 400 feet west of Nadine Drive to Rosecroft Road. The portion from Nadine Drive to Bel Pre Road will consist of the existing service road, while from Westbury to Rosecroft Road the existing Route 28 roadbed will be resurfaced and used as the new service road. The section between Bel Pre Road and Westbury Road will require new construction. The south side service road will be made one way in an easterly direction with right turn only movements being allowed at major intersections.

The north side service road will run from Bauer Drive to Emory Lane and from 800 feet west of Hannans Way to 600 feet east of Hannans Way. The portion from Bauer Drive to Emory Lane will be one way in a westerly direction, while the portion near Hannans Way will be two-way with cul-de-sacs at each end. Coordination with Montgomery County regarding service roads is discussed in the coordination and correspondence section on page 74 to 75 .

A noise barrier is proposed along the service road on both the north and south side of Maryland Route 28 between Bauer Drive and Maryland Route 115. During the design phase, details of the noise barrier location and type will be developed and coordinated with the public.

2. ALTERNATES CONSIDERED BUT NOT SELECTED

Alternate 1

This alternate proposed a 62 foot closed urban section with two 25 foot roadways and a 12 foot painted median. This alternate was approximately the same cost as Alternate 2, however it did not provide the safer condition which a divided median provides. Consequently, Alternate 2, a safer facility, was selected.

Alternate 3: The No-Build Alternate

With this alternate, no improvements would be made to Maryland Route 28 with the exception of routine maintenance. This alternate, however, would not provide a solution to meet increasing traffic demands, nor would it allow for safer traffic movements and would probably result in a higher accident rate. For these reasons, the No-Build Alternate was not selected.

Intersection and Interchange Alternates

At the intersection of Maryland Route 28, and Maryland Route 97, three interchange and two intersection alternates were studied. Intersection Alternate 2A is the selected Alternate. The interchange alternates not selected are discussed below:

Interchange Alternate 1  
Full Cloverleaf

Interchange Alternate 2  
Modified Interchange

Interchange Alternate 3  
Modified Interchange

Interchange Alternate 1 was rejected prior to the Public Hearing because of its more significant relocation impacts and impacts to historic sites. Interchange Alternates 2 and 3 were presented at the Public Hearing on April 6, 1978, however, they were also rejected because of their relocation impacts and impacts to historic sites.

Intersection Alternate 1 was also presented at the Public Hearing and would have moved the intersection of Maryland 28 and 97 to the north. This proposal had more significant impacts upon economic interests and historic sites. Consequently, as a result of Public Hearing comments and significant impacts on historic sites, Intersection Alternate 2A was developed and selected to minimize economic, relocation, and historic impacts.

Details of the specific impacts of the interchange and intersection alternates are provided in Tables 4 and 5 as well as Figure 12.

3. Design Criteria and Costs

The basic criteria for the alignment studies is for a four-lane urban highway (two lanes in each direction) with provisions for storage lanes to facilitate turning movements, when warranted, within the existing or dedicated State Highway Administration right of way along the project.

The design speed for this project is 50 miles per hour for Maryland Route 28 and 40 miles per hour on Maryland Route 609, with maximum profile grades not more than 4%.

SUMMARY OF RIGHT OF WAY AND CONSTRUCTION COSTS (TABLE #4)

DESCRIPTION  FACTORS	Bauer Drive to Md. Rte. 115 Alternate 2 (SELECTED ALT.)	Maryland Route 115 to Md. Route 609				No Build
		Alternates at Md. Route 28 and Md. Route 97				
		(SELECTED ALT.) Alternate 2-A	At-Grade inter- section (reloc.)	Interchange Alternate 2	Interchange Alternate 3	
Construction Costs	\$ 3,288,945(1)	\$417,605	\$ 826,376	\$ 3,550,655	\$3,187,257	0
Construction Costs Bauer Drive to Md. 609	--	\$3,706,550	\$4,115,321	\$ 6,839,600	\$6,476,202	0
Right of Way (Acres)	1.04 <sub>±</sub>	2.72 <sub>±</sub>	10.27 <sub>±</sub>	37.03 <sub>±</sub>	33.12 <sub>±</sub>	0
Right of Way (Acres) Bauer Drive to Md. 609	--	3.76 <sub>±</sub>	11.31 <sub>±</sub>	38.07 <sub>±</sub>	34.16 <sub>±</sub>	0
R/W and Relocation Costs	\$82,225 (2)	\$225,000	\$1,006,600	\$ 4,255,400	\$2,162,300	0
R/W and Reloc. Costs Bauer Drive to Md. 609	--	\$307,225	\$1,088,825	\$ 4,337,625	\$2,244,525	0
Total Costs (4)		\$4,013,775	\$5,204,146	\$11,177,225	\$8,270,727	0 (3)

- (1) Includes \$945,000 for 12,600 ft of noise barrier
- (2) Most R/W in this area previously dedicated or reserved
- (3) Normal maintenance will continue
- (4) Total R/W and construction cost for total project length

III. NEED FOR THE PROJECT

- 1. To provide a fundamental link in the highway system serving the area between the City of Rockville and Maryland Route 97 Corridor.
- 2. To eliminate the many safety hazards and serious maintenance problems of the existing facility, and the highly undesirable "dog-leg" condition between Maryland Route 609 and 28.
- 3. To meet the demand of the projected traffic volumes expected to increase through the planned development in the subject area with adequate design capacity.
- 4. To add service road, sidewalk, and bikeway on both sides.

A. Deficiencies of the existing facility

During the years 1974, 1975, and 1976, there were 273 traffic accidents reported for the subject roadway. For the three - year study period this amounts to an annual average of 42.7 accidents per mile; which, although informative does not provide a useful comparative statistic. In order to assess the relative safety of this or any other facility an accident rate based upon the frequency of accidents and the total vehicles miles traveled is therefore developed. This rate can then be compared to existing statewide averages and to other facilities for which like rates have been prepared. The average accident rate as developed for the subject location was 805.9 accidents per 100 million vehicle miles of travel (acc./100 MVM). This rate is significantly higher than the statewide average of 630.1 acc/100 MVM for all similar design highways now under state maintenance.

The congestion resulting from present traffic using this two-lane facility has had a substantial effect upon the traffic operations all along Maryland 28. Of the eleven intersections between Bauer Drive and Maryland 97, the following five were determined to be High Accident Intersections for the years designated below:

Maryland 28 @ Bauer Drive	1974-1975-1976
Maryland 28 @ Nadine Drive	1975
Maryland 28 @ BelPre Road	1975-1976
Maryland 28 @ Maryland 115	1975-1976
Maryland 28 @ Maryland 97	1974-1975-1976

Additionally, the road segment immediately east of Bauer Drive to just beyond the end of the divided highway was determined to be a High Accident Location in 1974. High Accident Locations and High Accident Intersections Location listings are prepared annually and forwarded to the Regional Traffic and District Engineers for study and possible corrective action.

Our present studies indicate that the accidents on this facility have been increasing steadily each year. With the anticipated increases in the traffic volume, we expect this trend to continue and for the accident rate to also increase as a result. The accident cost resulting from bodily injury, property destruction and other associated cost is estimated at \$2,124,000/100 MVM.

The proposed improvement to a four-lane divided partial control of access highway will provide the motorist with a safer design highway which will reduce congestion and permit a freer flow of traffic through the area. This safer design highway should experience an accident rate approximately 346.7 accidents for every 100 million vehicle miles of travel, and a corresponding accident cost to the motorist of \$1,106,000 for every 100 MVM and a monetary saving to the motorist of \$1,018,000/100 MVM.

More important than the monetary savings to be realized by construction of the proposed safer facility is the corresponding anticipated decrease in the loss of life and human misery brought about by the reduction in accidents.

The accident cost as indicated includes present worth of future earnings of those persons killed or permanently disabled, as well as monetary losses resulting from injury and property damage accidents. The unit cost utilized in the above computations were based on actual cost values obtained from three independent accident cost studies conducted in Washington, D. C. , Illinois and the California Division of Highways, and were updated to 1976 prices.

The existing Maryland Route 28 between Bauer Drive and Maryland Route 97 is a two-lane, two-way facility with 22 foot roadways on 40 foot right of way.

With the 1974 average daily traffic (A.D.T.) reaching above 18,000 (or 1,600 vph - two way) and considering its type, existing condition, and truck factor adjustment the facility has been operated above its capacity at Level "D"



41

Service which corresponds to an operating speed of approximately 35 mph or 1,700 equivalent passenger cars per hour -- both directions, under ideal conditions. As a result, many residents in this area complained about the tie-ups, long delays, and numerous stops, especially during the rush hours.

With a four-lane divided highway implementing the latest design standards, the proposed improvement can accommodate the projected 2002 A.D.T. of 46,000 at Level "D" Service or better which corresponds to an operating speed in the neighborhood of 35-40 m.p.h.

In addition, the subject portion of Maryland Route 28 has many safety hazards. There is no usable shoulder on either side for emergency parking, poor sight distance at many intersections, and no service road for the residents on the south side between Bel Pre Road and Rosecroft Road.

Furthermore, pavement of the existing facility is in fair-to-poor condition. With the numerous cracks developed over the years and due to rapid increase of traffic load, the pavement has to be constantly patched up and repaired, thus creating serious maintenance problems.

In order to eliminate the highly undesirable "dog-leg" condition which now exists between Maryland Route 609 and Maryland Route 28, it is planned to extend Maryland Route 28 on a new alignment for approximately one-half (1/2) mile providing continuity between the two routes.

The present "dog-leg" intersection creates confusion, unnecessary delays and stops, difficult turning movements and maneuvers, and is an accident prone area.

A bike trail is currently under construction in Rock Creek Park from Viers Mill Road to Baltimore Road by the Maryland National Capital Park and Planning Commission. A sidewalk project is also currently under construction on Old Baltimore Road by the Montgomery County Department of Public Works. The proposed bikeway system here can be tied to the park trail through extension of the bikeway to the County sidewalk project on Old Baltimore Road, approximately 1,000 feet west of Bauer Drive and utilizing the sidewalk from this point to the bike trail in Rock Creek Park.

42

The proposed project will provide additional capacity which is required to handle the large traffic volumes being generated by the rapid development of the adjacent area, such as the Rossmore Leisure World and the Montgomery County Housing project at the southeast corner of Maryland Route 28 and Bauer Drive. This long-planned highway incorporating the latest design features (presented in the next section) is foreseen to relieve congestion and limited turning movement, thereby improving accessibility and safety throughout the area.

It is to be noted that this route supplies direct access into the City of Rockville from the Maryland Route 97 corridor. The improvement would be the continuation of a recent dualization of Maryland Route 28 from First Street to Bauer Drive.

B. Planning Basis for the Proposed Action

This improvement to Maryland Route 28 is in agreement with the Maryland National Capital Park and Planning Commission's Aspen Hill Master Plan as adopted and approved in December, 1970. It is also compatible with the Maryland National Capital Park and Planning Commission's Draft Selected Transportation Elements, including Master Plan of Highways (Dated February, 1974).

IV. BASIS FOR A NEGATIVE DECLARATION

Based on the environmental studies completed for the project, it has been determined that the project will not have a significant impact upon the quality of the human or natural environment.

The project will not have a significant effect on the ecology, water quality, or air quality of the area. A minimum of social and economic impacts are anticipated since no residential units or businesses will be acquired. Noise levels will increase, however, mitigation measures can be utilized at all but two (2) of these areas.

No property will be required from any historic sites, and there will be no effect on any of the four historic sites potentially eligible for the National Register of Historic Places.

In view of the minimal environmental impact and in accordance with Volume 7, Chapter 7, Section 2, Paragraph 12 of the Federal-Aid Highway Program Manual, the project qualifies for submission as a Negative Declaration.

44

V. SOCIAL, ECONOMIC, AND ENVIRONMENTAL FACTORS

A. Socio-Economic

For the purpose of discussion, the project can be divided into two parts. The first part is the portion between Bauer Drive and Maryland Route 115 wherein the proposed improvement will be more or less following the existing alignment. The other part requiring relocation is the segment easterly from Maryland Route 115 to the tie-in with Maryland Route 609.

From Bauer Drive to Maryland Route 115:

The corridor here is very narrow and well defined. Over the past years, through the dedication process and the activities of the Maryland National Capital Park and Planning Commission, some land has been set aside for the anticipated highway improvement. The width of the land dedicated for highway use varies from a minimum of 140 feet + near Carrolton Road to a maximum of 190 feet + near Hannans Way. On the average, it has a uniform width of approximately 150 feet - 160 feet.

From Maryland Route 115 to Maryland Route 609:  
(See also Table 5)

This portion of Maryland Route 28 has to be relocated from its present location in order to eliminate the so-called dog-leg intersection now existing at Maryland Route 97. At the crossing with Maryland Route 97, a total of five (5) schemes were studied. Two were at-grade intersections. The other three schemes were various interchange patterns with Maryland Route 97.

Another project, the proposed Intercounty Connector which is planned to cross Maryland Route 97 north of Maryland Route 28 with the possibility of a major interchange at Maryland Route 97, is in the State Highway Administration's 1979-1984 Primary Highway Program. Project Planning studies will begin in early 1979.

Nevertheless, studies for the proposed relocation of Maryland Route 115, Intercounty Connector, reconstruction of Maryland Route 97 from Bel Pre Road to Maryland Route 28, and the extension of Maryland Route 97 northward from Maryland Route 28 will be coordinated with the proposed Maryland Route 28 improvement to insure the effectiveness of all these projects relative to traffic needs. An interim improvement for Maryland Route 97 from Bel Pre Road north to Maryland Route 28 is being designed. This will also provide better continuity between Maryland Route 28 and Maryland Route 609.

45  
Selected Alternate:

At-Grade Intersection 2A with Maryland Route 97:

With at-grade intersection 2A, no residential or commercial structures would be acquired. Under this alternate, economic impact on the community would be kept to a minimum.

Alternates Considered but not selected:

At-Grade Intersection with Maryland Route 97:

Two businesses and no residence would have been acquired under this proposal.

One of the two businesses, an auto wreckage yard, is right on the centerline of the proposed relocation of Maryland Route 28. The second business, auto repair shop #1, is located just south of the auto wreckage yard.

A two story frame dwelling which is also used for cat-breeding, is not within the proposed right of way taking lines and will have access provided from the service road. An estimated six (6) employees will be affected.

For the other remaining businesses and residential dwellings at the southwest corner of this intersection, access can be provided by the existing Georgia Avenue acting as a service road, through the existing Maryland Route 28 to the improved intersection with Maryland 115.

The area to the west of the proposed intersection is presently heavily developed and it is not expected that further development will occur; property values are expected to remain high. Some development may occur in the area east of the intersection.

The junk yard may not be able to relocate due to a scarcity of available sites. Montgomery County restricts junk yards to I-2 zoned land. The current sewer moratorium could also cause problems if the auto repair shop is not currently on public sewer. If the auto junk yard cannot relocate, this will be a loss to the people in the general area. The services of the auto repair shop will also be missed if they do not relocated nearby.

Interchange Alternate 2:

Interchange Alternate 2 is a modified interchange with the intent to serve the traffic need, yet to minimize displacement of any families or businesses which might be affected.

Under this interchange alternate, it is estimated that four (4) residential units (including historic site "I") and four (4) businesses would have been displaced.

The rental market is somewhat restricted regarding rentals of single family dwellings for under \$300.00 per month. A last resort housing situation could arise in the event that the tenant families being displaced are paying less than current economic rent on their dwelling. The relocation of the families being displaced is not expected to have any great impact on the communities into which they might move. The information regarding rentals was obtained from local realtors, newspapers, and personal experience in the market.

The businesses affected are a cat-breeding farm (Historic Site "J") an auto wreckage yard, an auto repair shop west of Maryland Route 97 and the auto repair shop located east of Maryland Route 97 and north of Maryland Route 609. Nine (9) employees are expected to be affected. The two story frame dwelling just north of the auto wreckage yard, together with a 1-1/2 story frame dwelling located on the north side of Maryland Route 609 (approximately 1,000 feet east of the intersection with Georgia Avenue, would also be taken. The large residence, with extra structures, located east of Maryland Route 97 and north of Maryland Route 609, will also be taken. Nine (9) persons would be relocated by this alternate. No minorities are known to be affected. The abandoned residential dwelling east of Maryland Route 97 and north of Maryland Route 609 will also be taken.

Interchange Alternate 3:

For Interchange Alternate 3, the relocation would be the same as Interchange Alternate 2, that is the same four (4) commercial establishments and four (4) residential units. Again, approximately nine (9) persons, some of them elderly, and nine (9) employees would have been relocated.

(Note: All estimates for employees affected are based on similar types of businesses).

The impacts resulting from the proposed improvement are not expected to be very significant. No illiterate, handicapped, non-driver, or minority groups are identified or expected to be displaced in the study area, although the 6 - 30 employees may include some minority group members. Sidewalks and bikeways will be provided on both sides with crossings at convenient intervals for pedestrians and bicyclists in the surrounding area.

Traffic studies indicate that a lower level of service (more congestion) is associated with the At-Grade Intersection than with the Interchange Alternates. This is due to the turning movements necessary at the Maryland Route 28/97 intersection. The interchange loops and ramps would handle the projected traffic volumes more efficiently.

SUMMARY OF RELOCATIONS

ALTERNATES FACTORS	AT-GRADE INTERSEC- TION 2A	AT-GRADE INTER- SECTION	INTERCHANGE ALTERNATE#2 MODIFIED	INTERCHANGE ALTERNATE#3 MODIFIED	NO-BUILD ALTERNATE
Residential Units: Owner-Occupants	0	0	1	1	0
Tenant-Occupants		0	3	3	0
# of Dwellings Acquired	0	0	3	3	0
Persons Dis- placed (1)	0	0	9	9	0
Commercial Establishments: Number	0	2	4	4	0
Employees (2) Relocated (3)	0	6	9	9	0
Commercial Establishments Relocated	0	(1) Auto Junk Yard  (2) Auto Repair Shop #1	(1) Auto Junk Yard  (2) Auto Repair Shop #1  (3) Cattery  (4) Auto Repair Shop #2	(1) Auto Junk Yard  (2) Auto Repair Shop #1  (3) Cattery  (4) Auto Repair Shop #2	

- (1) Some elderly people may be relocated under either of the (2) Interchange Alternates. No minority group members will be relocated.
- (2) Some minority group members may be impacted by the commercial relocations.
- (3) All commercial employee relocation figures are estimates, based on similar types of businesses.

NOTE:

No community facilities, non-profit organizations, industrial enterprises or farms will be relocated under any of the alternates.

The No-Build Alternative:

Discussion and evaluation of the two (2) alternates together with the three intersection and interchange alternates at Maryland Route 97 crossing have been presented. Another alternate is the No-Build Alternate, which would include routine maintenance. Further information on the No-Build Alternative is provided on page 20 of this document.

It is the policy of the Maryland State Highway Administration to insure compliance with the provisions of Title VI of the Civil Rights Act of 1964 and related Civil Rights laws and regulations which prohibit discrimination on the grounds of race, color, religion, natural origin, physical or mental handicaps in all program projects. This policy has been incorporated into all levels of the highway planning process in order that proper consideration be given to the social, economic, and environmental effects of all highway projects.

B. Historical and Archeological Sites

As indicated in the Draft Negative Declaration, a potential National Register Historic District was identified in the Norbeck vicinity. Subsequent coordination with the Keeper of the National Register, however, has indicated that Norbeck is not a historic district. Only four sites now appear eligible for the National Register, and include (see Figure 11 ):

- (N) Whites Hardware, 15510 Georgia Avenue
- (O) James Burris House, III, 15220 Georgia Avenue
- (R) Mt. Pleasant Church
- (S) Norbeck Community Center

As indicated by the Maryland Historical Trust (see coordination letter on page 76), the project will have no effect on any of the four potential National Register sites.

Sites which are now considered to be locally significant (Maryland Inventory) include:

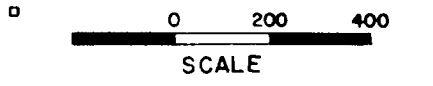
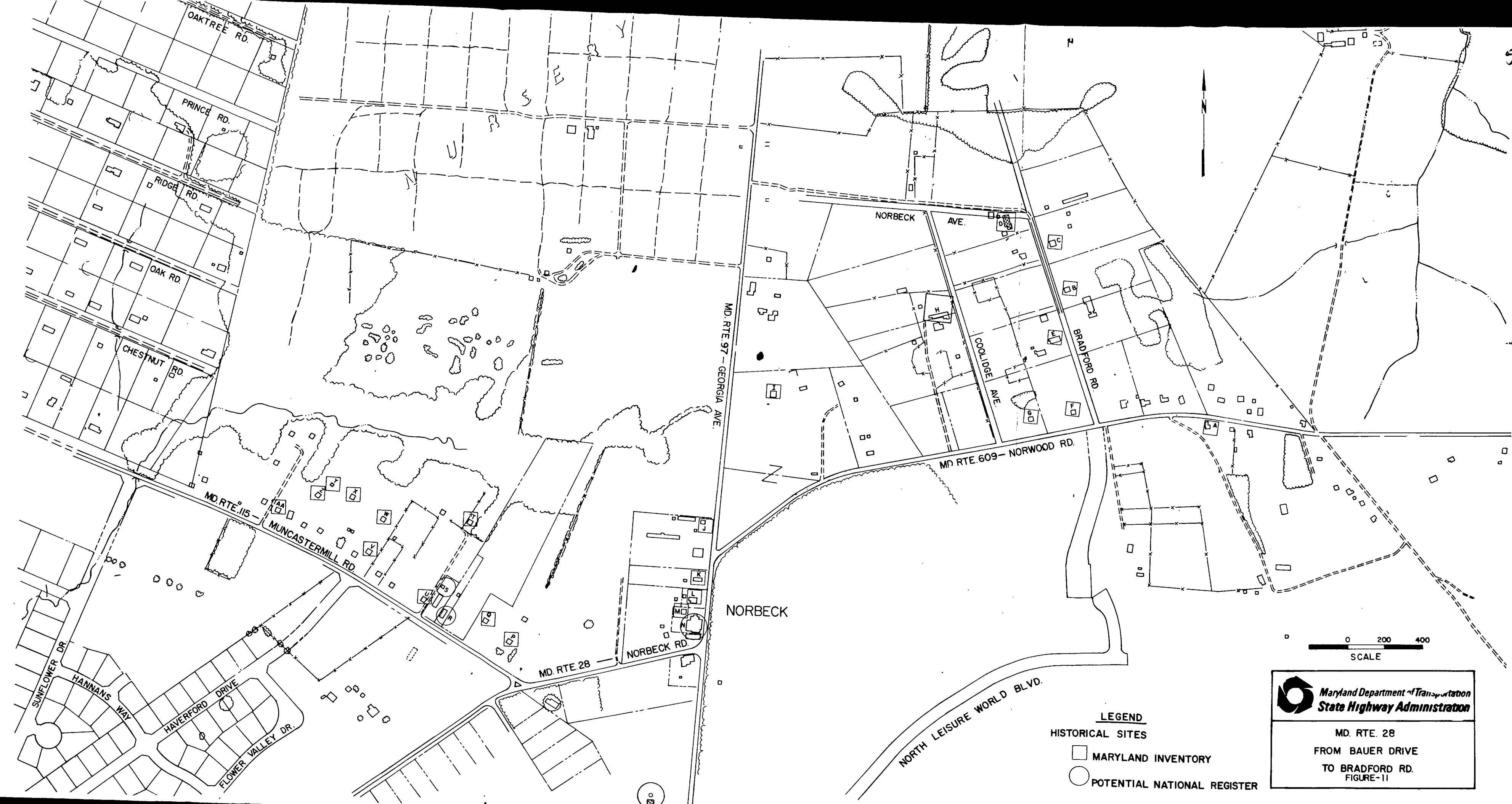
- (A) James Burris House I, 3212 Norwood Road
- (B) Tenant Cabin
- (C) Tenant Cabin
- (D) Albin Brooke Farmhouse



- (E) Dim Hat Acres House
- (F) Easton House, 3501 Norwood Road
- (G) One-Story House, 3509 Norwood Road
- (H) Curtis House, 3601 Norwood road
- (I) Charles Anderson Farmhouse , 15621 Georgia Avenue
- (J) Cattery, 15520 Georgia Avenue
- (K) Two-Story I-House, 15518 Georgia Avenue
- (L) Laurence White House, II 15516 Georgia Avenue
- (M) Laurence White Housse I, 15514 Georgia Avenue
- (P) One-Story House, 4007 Muncaster Mill Road
- (Q) One-Story House, 4011 Muncaster Mill Road
- (T) Farmhouse
- (U) Two-Story House, 4105 Muncaster Mill Roadf
- (V) One-Story House
- (W) One-Story Cabin
- (X) One-Story Cabin
- (Y) One-Story Cabin
- (Z) Ricks House
- (AA) Two-Story House, 4289 Muncaster Mill Road

Included with the Draft Negative Declaration was a section 4(f) discussion. However, because the Norbeck area is no longer considered a historic district and because of modifications to the at-grade intersection alternate, this project will no longer require the use of 4(f) property. The modifications to the at-grade concept are discussed in the Alternates section on page 20 . As a result of these changes, no section 4(f) discussion is included in this document.

. An archeological reconnaissance conducted in the project area indicates that there are no archeological sites. If any sites are discovered during construction, appropriate salvage procedures would be implemented.



- LEGEND**
- HISTORICAL SITES
  - MARYLAND INVENTORY
  - POTENTIAL NATIONAL REGISTER

**Maryland Department of Transportation**  
**State Highway Administration**

MD. RTE. 28  
 FROM BAUER DRIVE  
 TO BRADFORD RD.  
 FIGURE-11

**MD. RTE. 28  
HISTORICAL LAND USE**

51

	<b>TOTAL ACRES REQUIRED ±</b>	<b>TOTAL ACRES REQUIRED FROM HISTORICAL PROPERTIES ±</b>	<b>HISTORICAL STRUCTURES REQUIRED</b>	<b>TOTAL HISTORICAL PROPERTIES IMPACTED</b>
<b>FROM MD. RTE. 115 TO BRADFORD RD.</b>				
<b>AT GRADE INTERSECTION ALTERNATE 2a (SELECTED ALT.)</b>	2.72	—	—	—
<b>AT GRADE INTERSECTION ALTERNATE 1 &amp; 2</b>	10.27	1.5	—	5
<b>INTERCHANGE ALTERNATE - 1</b>	64.63	15.82	I, J, K L, M, N	13
<b>INTERCHANGE ALTERNATE - 2</b>	37.03	13.61	I, J	6
<b>INTERCHANGE ALTERNATE - 3</b>	33.12	13.61	I, J	6

**FIGURE 12**

C. Air Quality

To evaluate the alternates in terms of possible impact on ambient air quality, two types of analyses have been conducted. The first predicts carbon monoxide concentrations adjacent to the highway by using the Environmental Protection Agency HIWAY Model. The second type predicts total pollutant generation of carbon monoxide, nitrogen oxides and total hydrocarbons. The results of the near-field analysis may be compared to the Federal and State Ambient Air Quality Standards. The pollutant burden calculations provide a means for comparing the relative daily pollutant contributions of each alternate.

Each alternate has been considered in terms of the effect that variations in roadway configuration, capacity, traffic volumes and alignment have on vehicle emissions, pollutant dispersal and receptor locations.

The years studied include the estimated completion year (1982) and the design year (2002).

The Technical Air Quality Analysis was submitted to the Maryland Bureau of Air Quality and Noise Control.

Summary of Analysis

The project microscale analysis determined that there was one violation of the eight-hour carbon monoxide Ambient Air Quality Standards and this occurred in 1982 with the No-Build option. There are no violations with the selected Alternate. Therefore, the selected alternate is consistent with the State Implementation Plan.

The mesoscale analysis indicated that the Build Alternate will generate greater pollutant burdens for each of the three pollutants studied in every case but one. The exception was that the No-Build Alternate generated a greater total hydro-carbons burden in 2002.

Details of Air Quality Prediction

Analysis Inputs

The prediction of carbon monoxide concentrations adjacent to the existing and proposed roadways was conducted using two versions of the EPA HIWAY Line Source Model. The first version is the standard single link model which was used to do cross-sections near a sensitive receptor. The second version contains modifications to analyze intersections.

The factors which must be considered in making these projections include existing background air quality, facility design, traffic data, vehicular emission factors and meteorological data. The inputs used in these areas and the assumptions made in conducting the "worst-case" analysis are as follows:

. Background Concentrations

Carbon Monoxide background for this project was derived through the use of a Hanna-Gifford based area source model developed by the Metropolitan Washington Council of Governments for use in predicting future carbon monoxide levels in the Washington area. These projections are based on AP-42 Supplement V and TPB traffic demand projections. The resulting concentrations for the project are shown in Table 6.

TABLE 6  
Carbon Monoxide Background  
mg/m<sup>3</sup>

	One-Hour	Eight-Hour
1982	7.9	2.6
2002	3.9	1.6

Traffic Projections

The traffic for this project is illustrated in Figures 5 and 5A and in Table 7.

Emission Factors

The emission factors used in this analysis are based on the recent (March, 1978) version of AP-42 Supplement V and are derived utilizing the Environmental Protection Agency Mobile 1 computer program. The program was modified to include the light-duty vehicle age distribution and mileage accrual specific to the project area while national default values were used for the remaining vehicle types. The assumptions used in deriving these factors are as follows:

- a. The Federal Motor Vehicle Control Program will proceed as specified in the Clean Air Act Amendments of August, 1977.

- 54
- b. Speeds used are those indicated in the traffic data.
  - c. It was assumed Inspection-Maintenance would not be in effect.
  - d. It was assumed all vehicles are in the hot-stabilized mode.
  - e. A worst-case temperature of 0 degrees F. was used.
  - f. Assumptions regarding use of catalyst, control of truck emissions, and deterioration are those inherent in the Mobile 1 program.

#### Worst-Case Meteorology

The microscale carbon monoxide concentrations near interchanges were predicted using the Environmental Protection Agency HIWAY Model, modified for this purpose. This version analyzes 16 different wind directions (0-360 degrees) in 22.5 degree increments in order to determine the worst-case direction for each receptor. The methodology used to calculate dispersion, etc. is the same as in the version used to predict concentrations at cross-sections. The values used for the worst-case meteorology inputs are listed below:

##### One-Hour

- A. Wind Speed: 1m/sec
- B. Stability Class: F
- C. Wind Direction: That which will produce maximum concentration at receptor of concern.
- D. Mixing Height: 350m

##### Eight-Hour

- A. Wind Speed: 2m/sec before 17:00  
1m/sec after 17:00
- B. Stability Class: D before 17:00  
F after 17:00
- C. Wind Direction: Same as one-hour
- D. Mixing Height: Same as one-hour

55

## Analysis Locations and Results

The location of the sensitive receptors is shown in Figure 12.5. A cross-sectional analysis was done in the area of the Church of Christ at Manor Woods since it is removed from the Route 28 and 97 intersection. The results of the microscale analysis are shown in tables 8 and 9. Since each receptor concentration is representative of the wind direction that produces the maximum concentration, and that direction may change from one receptor to another, all the concentrations shown would not occur simultaneously.

Table 8 contains the only violation of the State and Federal Ambient Air Quality Standards. This occurs in 1982 with the eight-hour concentration at receptor number 2.

### Sensitive Receptors

The sensitive receptors analyzed in terms of microscale carbon monoxide impact are listed below and their locations are shown on Figure 12.5.

- Sensitive Receptors
- Church of Christ at Manor Woods
- St. Patricks Catholic Church

The carbon monoxide concentrations which would occur at any future sensitive receptor may be determined by referring to Tables 8 and 9.

### Pollutant Burden Analysis

In addition to predicting the microscale carbon monoxide impact of a proposed project, it is also necessary to evaluate the impact of the project upon regional levels of motor vehicle related pollutants. This assessment is required due to the direct impact the emissions have upon regional "background" pollutant concentrations and due to the role hydrocarbons and nitrogen oxides have as precursor pollutants in the formation of photochemical oxidants. This analysis is particularly significant in the Washington, D. C. and Baltimore, Maryland regions due to the frequent occurrence of carbon monoxide and oxidant levels which exceed the Ambient Air Quality Standards.

As the present state of the art does not allow an accurate quantitative assessment of the impact a single facility will have on regional photochemical oxidant levels, it is most appropriate to evaluate a project through a comparison of the quantity of primary pollutants which will be added to the regional airshed.

The pollutant burdens are shown in Table 10. As the analysis indicates the Build Alternate will generate carbon monoxide, nitrogen oxides and total hydrocarbon burdens greater than the No-build Alternate for every year except 2002 with total hydrocarbons. However, these differences in emissions were slight. For both alternates the design year (2002) carbon monoxide and total hydrocarbons loadings were less than those for 1982 since the emission reductions, due to the FMVCP, more than compensate for the increased traffic. The 2002 nitrogen oxides burden was higher than the 1982 burden for the Build Alternate. This was because the emissions reduction during the period was not enough to offset the traffic increase, except for the No-Build case.

#### Impact of Construction Activities

The construction phase of the proposed project has the potential of impacting the ambient air quality through such means as fugitive dust from grading operations, materials handling, and through the possible burning of land clearing debris. The State Highway Administration has addressed this possibility by establishing Specifications for Materials, Highways, Bridges, and Incidental Structures which specifies procedures to be followed by contractors involved in State work.

The Maryland Bureau of Air Quality and Noise Control was consulted to determine the adequacy of the Specifications in terms of satisfying the requirements of the Regulations Governing the control of Air Pollution in the State of Maryland. The Maryland Bureau of Air Quality and Noise Control found that the specifications are consistent with the requirements of these regulations. Therefore, during the construction period, all appropriate measures will be taken to minimize the impact on the air quality of the area.

#### D. Noise

The analysis of existing and future highway noise impact within the project study area utilized the Federal Highway Administration's Federal Highway Program Manual, Volume 7, Chapter 7, Section 3, "Procedures for Abatement of Highway Traffic Noise and Construction Noise".

##### Modeling Procedures:

Projections of design year  $L_{10}$  noise levels were made utilizing the TSC prediction method modified to account for lower truck emissions for medium duty trucks. The method projects noise levels relating vehicle volume, mix, speed, grade, distance, topography, etc.

For traffic information, see page 16 .



Figure 12.5

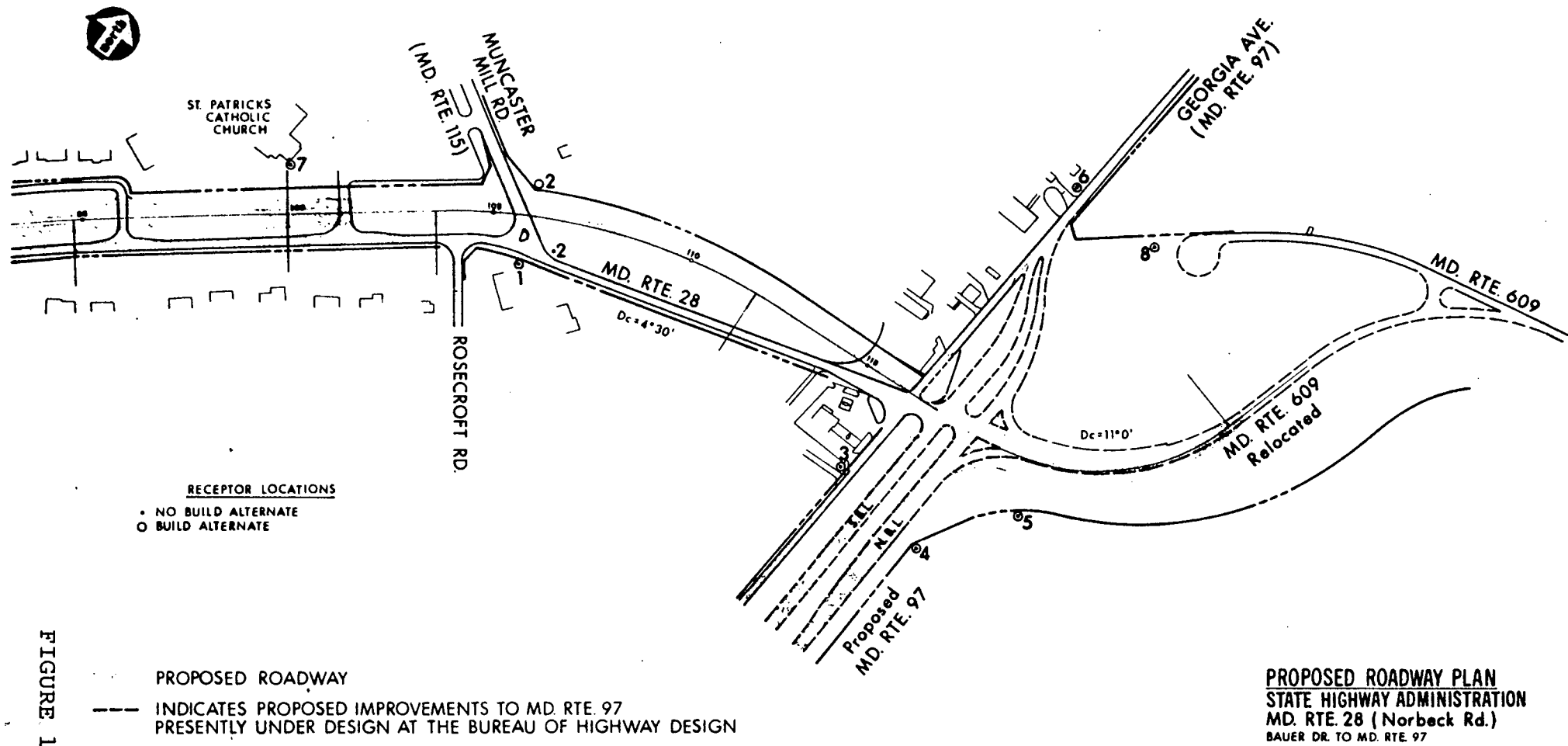


FIGURE 12.5

57

58

TABLE 7

## 1. Percent of Trucks in Average Daily Traffic

- A. Gasoline powered - 3.4%  
 B. Diesel powered - 3.6%

## 2. Modeling Speeds

	No-Build	Build
1982	35mph	40mph
2002	20mph	40mph

## 3. Diurnal Traffic Curve

<u>Hour</u>	<u>Percent</u>	<u>Hour</u>	<u>Percent</u>
12-1 a.m.	1.39	12-1 p.m.	5.28
1-2 a.m.	.59	1-2 p.m.	5.49
2-3 a.m.	.28	2-3 p.m.	5.47
3-4 a.m.	.20	3-4 p.m.	5.74
4-5 a.m.	.16	4-5 p.m.	6.95
5-6 a.m.	.31	5-6 p.m.	8.82
6-7 a.m.	1.25	6-7 p.m.	7.71
7-8 a.m.	4.76	7-8 p.m.	5.81
8-9 a.m.	8.25	8-9 p.m.	4.92
9-10 a.m.	5.93	9-10 p.m.	4.48
10-11 a.m.	4.76	10-11 p.m.	3.61
11-12 Noon	5.38	11-12 Midnight	2.46

TABLE 8  
 Total Carbon Monoxide Concentrations  
 (mg/m<sup>3</sup>)  
 No-Build Alternate

Receptor Number	1982			2002		
	Distance From Edge of Road (feet)	One-Hour	Eight-Hour	Distance From Edge of Road (feet)	One-Hour	Eight-Hour
1	10 R.O.W.	16.2	7.3	10 R.O.W.	9.9	5.0
2	10 R.O.W.	21.2	10.2	10 R.O.W.	13.5	7.1
3	78 R.O.W.	12.6	5.3	78 R.O.W.	8.9	4.5
4	38 R.O.W.	15.3	6.8	38 R.O.W.	10.7	5.5
5	135 R.O.W.	12.5	5.2	135 R.O.W.	7.9	3.9
6	12 R.O.W.	10.7	4.2	90 R.O.W.	6.1	2.9
7*	190	15.1	6.7	190	9.1	4.6
8	200	13.6	5.8	40 R.O.W.	12.2	6.3
9**	133	11.0	4.4	133	6.2	2.9

\*St. Patricks Catholic Church  
 \*\*Church of Christ at Manor Woods

AMBIENT AIR QUALITY STANDARDS

Carbon Monoxide

	Primary	Secondary
8 hour maximum	10	40
1 hour maximum	10	40

60

TABLE 9  
 Total Carbon Monoxide Concentrations  
 (mg/m<sup>3</sup>)  
 Build Alternate

Receptor Number	1982			2002		
	Distance From Edge of Road (feet)	One-Hour	Eight-Hour	Distance From Edge of Road (feet)	One-Hour	Eight-Hour
1	10 R.O.W.	10.7	4.2	10 R.O.W.	6.2	2.9
2	25 R.O.W.	12.1	5.0	25 R.O.W.	7.2	3.5
3	65 R.O.W.	13.3	5.7	65 R.O.W.	7.1	3.4
4	38 R.O.W.	14.2	6.2	38 R.O.W.	7.2	3.5
5	80 R.O.W.	12.7	5.3	80 R.O.W.	7.8	3.8
6	12 R.O.W.	20.6	9.8	90 R.O.W.	7.0	3.4
7*	90	11.8	4.8	90	6.8	3.3
8	200	13.0	5.5	40 R.O.W.	9.4	4.7
9**	142	9.7	3.6	142	5.3	2.4

\*St. Patricks Catholic Church

\*\*Church of Christ at Manor Woods

61

TABLE 10  
Pollutant Burden  
Kg/Day

Carbon Monoxide

	No-Build	Build
1982	780	781
2002	570	581

Nitrogen Oxides

	No-Build	Build
1982	136	159
2002	82	180

Total Hydrocarbons

	No-Build	Build
1982	88	90
2002	67	57

62

DESIGN NOISE LEVEL/ACTIVITY RELATIONSHIPS

Noise Level	Activity Category
L <sub>10</sub> 60 dBA Leq 57dBA	Tracts of land in which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. For example, such areas could include amphitheaters, particular parks or portions of parks, or open spaces which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
L <sub>10</sub> 70dBA Leq 67dBA	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, picnic areas, recreation areas, playgrounds, active sports area, and parks.
L <sub>10</sub> 75dBA Leq 72dBA	Developed lands, properties or activities not included in above categories.
Unlimited	Undeveloped Lands
L <sub>10</sub> 55dBA Leq 72dBA	Public meeting rooms, schools, churches, libraries, hospitals, and other such public buildings.

Interior

Design hour volumes and speed are representative of Level of Service C as defined in the 1965 edition of the Highway Research Board's "Highway Capacity Manual". These volumes are for the summer peak.

Modeling Results:

Design year peak hour L<sub>10</sub> noise levels at each noise sensitive area are presented in Tables 11 and 12.

Impact Analysis:

Determination of noise impact is based upon comparison with established standards and existing (ambient) noise levels. The Maryland State Highway Administration utilizes the following criteria for comparison of future noise levels with ambient conditions.

67

Increase over Ambient

Assessment

Decrease  
0 - 5 dBA  
6 - 10 dBA  
11 - 15dBA  
Over - 15 dBA

Positive Impact  
Negligible Impact  
Minor Impact  
Significant Impact  
Severe Impact

The relationship of future to existing noise levels is a very important factor in the impact assessment process. Adverse impact often occurs without the Federal design noise levels being exceeded. Whenever existing noise levels increase by more than ten decibels the Administration considers the use of noise control measures to minimize impact.

Noise Sensitive Area Description

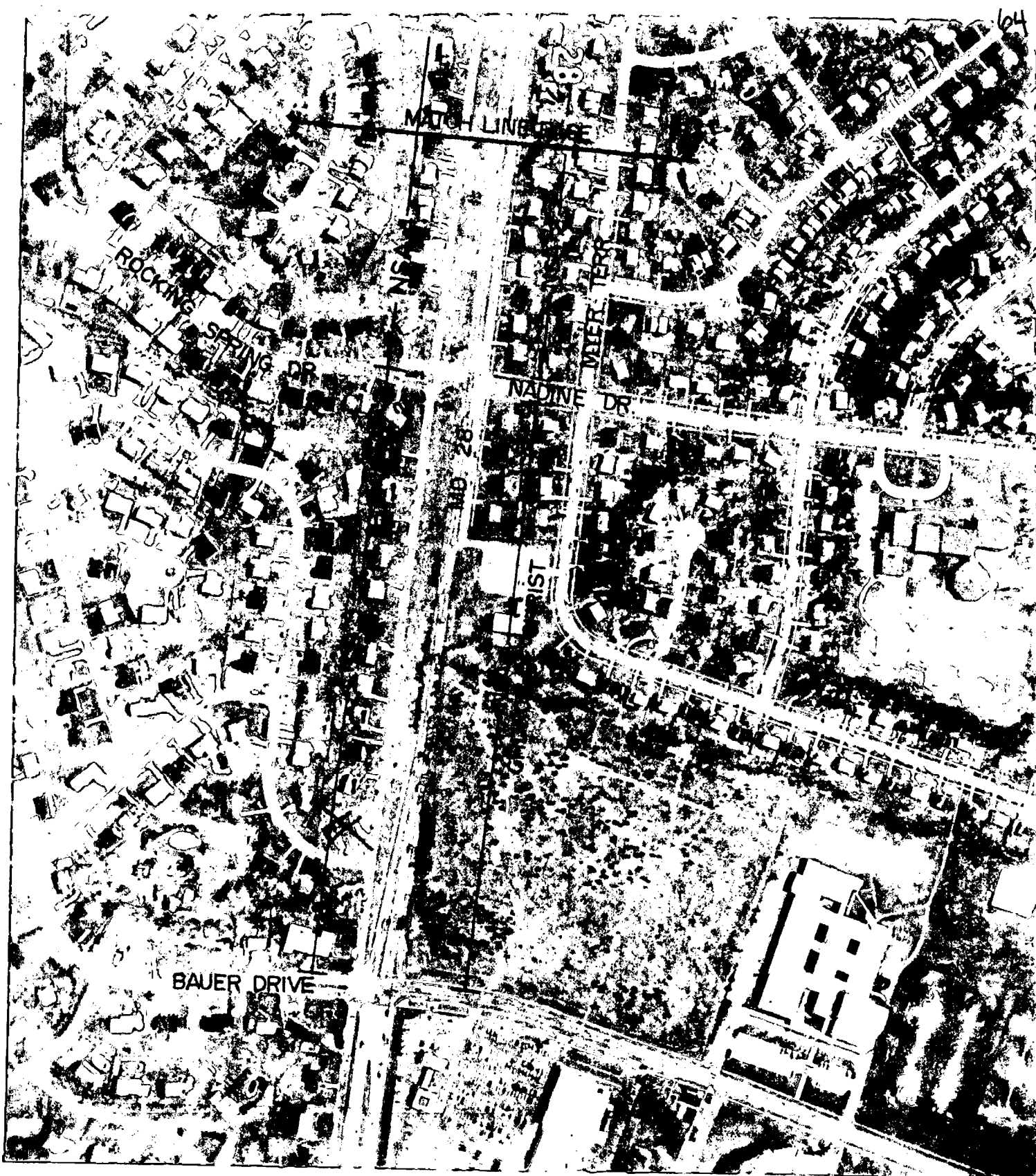
Fourteen sensitive areas have been identified on this project. These are residential areas with the exception of two; which include religious use areas, and one commercial. These noise sensitive areas are delineated on the maps on pages 58-62 . These maps also indicate noise level measurement locations within each area. The following is a description of each area.

1. Church of Christ of Manor Woods and residential area located between Bauer Drive and Nadine Drive south of the existing Maryland Route 28. Ambient noise levels are comprised predominately of traffic noise. Nine structures are included in this area.

2. Manor Woods residential development south of existing Maryland Route 28 between Nadine Drive and Bel-Pre Road. Ambient noise levels are influenced by traffic noise from the existing highway. There are eighteen homes in this area.

3. Manor Lake residential development north of existing Maryland Route 28 between Bauer Drive and Rocking Spring Drive. The residences adjacent to the existing highway experience noise levels controlled by traffic noise from the highway. This influence is diminished as one is further removed from the highway. Sixteen residences are included in this area.

4. Residential development north of Maryland Route 28 between Rocking Spring Drive and Emory Lane. Noise from traffic on Maryland Route 28 controls ambient noise levels. Fourteen residences comprise this area.



Maryland Department of Transportation  
 State Highway Administration

**NOISE SENSITIVE AREAS**

**MARYLAND ROUTE 28**

BAUER DR. TO MD. RTE. 609

SCALE 1" = 400' ±

FIGURE 13a



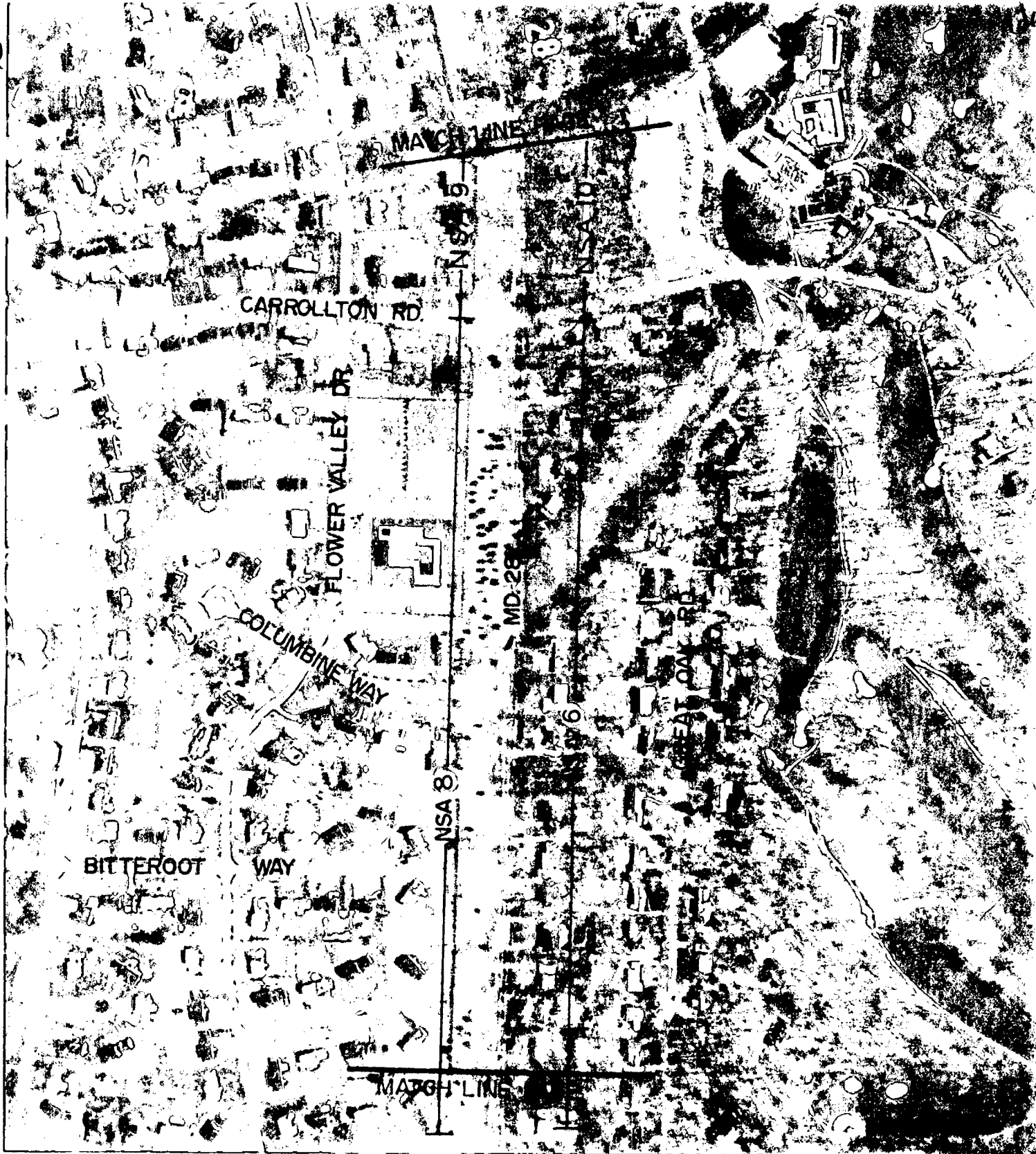
65



Maryland Department of Transportation  
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**NOISE SENSITIVE AREAS**  
**MARYLAND ROUTE 28**  
 BAUER DR. TO MD. RTE. 609  
 SCALE 1" = 400' ±      FIGURE 13 b

66



Maryland Department of Transportation  
 State Highway Administration

# NOISE SENSITIVE AREAS

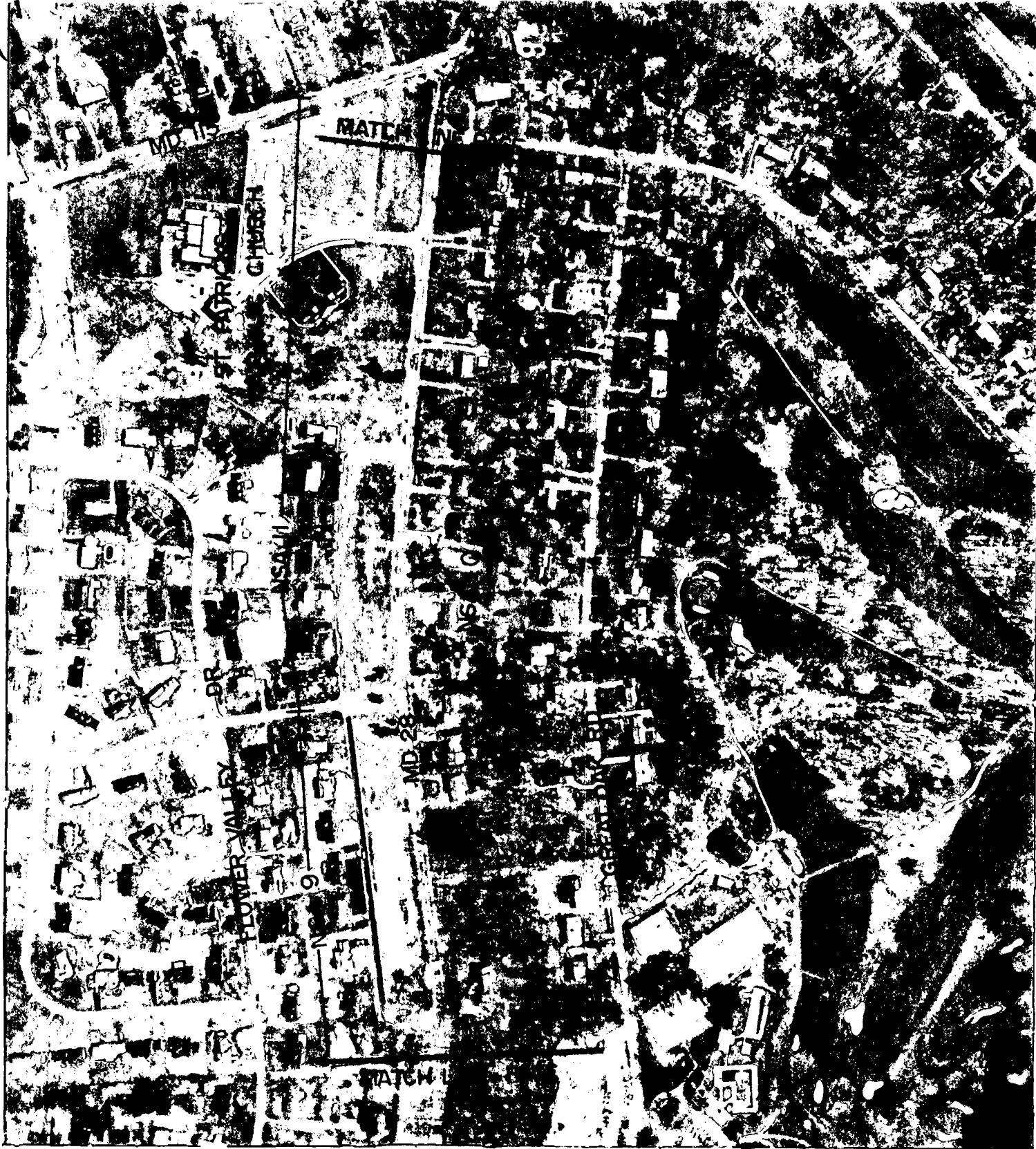
## MARYLAND ROUTE 28

BAUER DR. TO MD. RTE. 609

SCALE 1" = 400' ±

FIGURE 13c

67



Maryland Department of Transportation  
 State Highway Administration

**NOISE SENSITIVE AREAS**  
**MARYLAND ROUTE 28**  
 BAUER DR. TO MD. RTE. 609  
 SCALE 1"=400'±      FIGURE 13 d

89



Maryland Department of Transportation  
State Highway Administration

**NOISE SENSITIVE AREAS**  
**MARYLAND ROUTE 28**  
BAUER DR. TO MD. RTE. 609  
SCALE 1"=400' ±      FIGURE 13 e

69

5. Residential development south of Maryland Route 28 between Bel-Pre Road and Westbury Road. As with other noise sensitive areas on this project, ambient noise levels are controlled by noise generated from Maryland Route 28. Nine residences make up this area.

6. Manor Park residential development between Westbury Road and Carrollton Road south of existing Maryland Route 28. Seventeen residences are included in this area.

7. Residential development north of Maryland Route 28 between Emory Lane and Westbury Road. Ten residences comprise this area.

8. Residential development east of NSA 7 between Westbury Road and Carrollton Road north of existing Maryland Route 28. This area includes the Flower Valley Community pool and tennis court complex and ten residences.

9. Residential development north of Maryland Route 28 between Carrollton Road and Hannan's Way. Existing noise is controlled by traffic noise. Eleven residences are included in this area.

10. Residential development south of Maryland Route 28 between Carrollton Road and Rosecroft Road. Fifteen residences make up this area.

11. Residential area north of Maryland Route 28 between Hannan's Way and Muncaster Mill Road. This area includes Saint Patrick's Catholic Church which is located at the corner of Maryland Route 28 and Muncaster Mill Road and seven residences.

12. Commercial area in the vicinity of White's Hardware Store.

13. Residence on Maryland Route 609 east of Maryland Route 97.

14. Residential development in the new section of Leisure World at Maryland Route 609 and 97.

#### Ambient Noise Measurements:

L<sub>10</sub> noise levels were measured at several locations within each noise sensitive areas as shown in Figure 13 a - e. The results of the measurement program are listed below and represent weekday measurements.

Noise Sensitive Area	Location	Non		Peak	
		Peak Time	L <sub>10</sub> dBA	Time	L <sub>10</sub> dBA
1	Church of Christ 5204 Norbeck Road	11:00 a.m.	68	4:24 p.m.	66
		11:15 a.m.	69	4:35 p.m.	
2	5116 Norbeck Road 5024 Norbeck Road 5004 Norbeck Road	11:15 a.m.	66	4:35 p.m.	66
		11:35 a.m.	69		
		12:55 a.m.	68	4:55 p.m.	67
3	5401 Norbeck Road 5305 Norbeck Road 5205 Norbeck Road	2:40 p.m.	63		
		1:10 p.m.	63	5:30 p.m.	60
		2:55 p.m.	63		
4	5113 Norbeck Road 5101 Norbeck Road 14800 Clavel Street	3:05 p.m.	61		
		10:55 a.m.	63		
		12:50 p.m.	59	5:15 p.m.	61
5	4816 Norbeck Road 4804 Norbeck Road 14808 Westbury Road	1:20 p.m.	67		
		1:30 p.m.	66	5:55 p.m.	71
		2:40 p.m.	69		
6	4624 Norbeck Road 4512 Norbeck Road 4404 Norbeck Road	11:40 a.m.	69	4:55 p.m.	
		10:30 a.m.	68	4:55 p.m.	68
		12:00 noon	67		
7	4904 Flower Valle Drive 4824 Flower Valley Drive 14900 Westbury Road	1:05 p.m.	58		
		1:55 p.m.	59	5:45 p.m.	58
		11:10 a.m.	62		
8	4621 Norbeck Road 15000 Columbine Way 15100 Carrolton Road	11:25 a.m.	62		
		2:15 p.m.	60	5:00 p.m.	61
		2:25 p.m.	61		
9	15101 Carrolton Road 4243 Norbeck Road 15200 Hannans Way	2:10 p.m.	61		
		10:35 a.m.	59	4:35 p.m.	62
		1:55 p.m.	61		
10	4244 Norbeck Road 4208 Norbeck Road 4104 Norbeck Road	2:55 p.m.	67		
		11:30 a.m.	66	4:15 p.m.	65
		3:15 p.m.	66		
11	4209 Norbeck Road 4203 Norbeck Road St. Patrick's Catholic Church	10:55 a.m.	56	4:35 p.m.	
		1:35 p.m.	58		
		11:45 a.m.	54	4:15 p.m.	57
12	White's Hardware	11:30 a.m.	71		
13	Residence	11:00 a.m.	63		
14	Leisure Wood	10:30 a.m.	61		

# BUILD ALTERNATES

(BUILD)

COMPARISON OF PREDICTED NOISE LEVELS WITH AMBIENT AND DESIGN GOALS (PHLM 7.7-3)

NOISE S AREA	LAND USE	AMBIENT L <sub>10</sub>	DESIGN YR. L <sub>10</sub> (2000)	CHANGE IN L <sub>10</sub>	RELATION TO DESIGN GOAL	ASSESSMENT
1	Residential/ Religious	68dBA	72dBA /	+4	+2	negligible impact; design noise level exceeded
2	Residential	66dBA	73dBA /	+7	+3	minor impact; design noise level exceeded
3	Residential	63dBA	73dBA /	+10	+3	minor impact; design noise level exceeded
4	Residential	61dBA	75dBA /	+14	+5	significant impact, design noise level exceeded
5	Residential	67dBA	70dBA	+3	equal	negligible impact
6	Residential	68dBA	71dBA /	+3	+1	negligible impact; design noise level exceeded
7	Residential	59dBA	75dBA /	+16	+5	severe impact; design noise level exceeded
8	Residential	61dBA	75dBA /	+14	+5	significant impact; design noise level exceeded
9	Residential	62dBA	75dBA /	+13	+5	significant impact; design noise level exceeded
10	Residential	66dBA	70dBA	+4	equal	negligible impact
11	Residential/ Religious	57dBA	72dBA /	+15	+2	significant impact; design noise level exceeded
12	Commercial	71dBA	75dBA x	+4	equal	negligible impact
13	Residential	63dBA	70dBA	+7	equal	minor impact
14	Residential	61dBA	68dBA	+7	-2	minor impact

-65-

11



# NO BUILD ALTERNATE

(NO-BUILD)

COMPARISON OF PREDICTED NOISE LEVELS WITH AMBIENT AND DESIGN GOALS (FORM 7.7-3)

NOISE SOURCE AREA	LAND USE	AMBIENT L <sub>10</sub>	DESIGN YR. L <sub>10</sub> (2002)	CHANGE IN L <sub>10</sub>	RELATION TO DESIGN GOAL	ASSESSMENT
1	Residential/ Religious	68dBA	68dBA	0	-2	No Impact
2	Residential	66dBA	73dBA	+7	+3	Minor impact; Design Noise Level exceeded
3	Residential	63dBA	68dBA	+5	-2	negligible impact
4	Residential	61dBA	68dBA	+7	-2	minor impact
5	Residential	67dBA	70dBA	+3	Equal	negligible impact
6	Residential	68dBA	70dBA	+2	Equal	negligible impact
7	Residential	59dBA	65dBA	+6	-5	minor impact
8	Residential	61dBA	67dBA	+6	-3	minor impact
9	Residential	62dBA	67dBA	+5	-3	negligible impact
10	Residential	66dBA	69dBA	+3	-1	negligible impact
11	Residential/ Religious	57dBA	66dBA	+9	-4	minor impact
12	Commercial	71dBA	75dBA	+4	equal	negligible impact
13	Residential	63dBA	65dBA	+3	-4	negligible impact
14	Residential	61dBA	66dBA	+5	-4	negligible impact



Potential for Noise Control:

Of the nine impacted sensitive areas (1, 2, 3, 4, 6, 7, 8, 9, and 11) to be discussed in this section, noise control measures appear feasible for all of the areas except area 1 and the portion of area 11 containing St. Patrick's Catholic Church.

Frontage roads will be constructed to serve the residences with existing entrances onto Maryland Route 28. There will be a variable median between the frontage road and the mainline. This median area could be utilized for placement of acoustic walls to reduce noise levels adjacent to Maryland Route 28.

A study to determine sight restriction limits on possible barrier construction has been completed. The following is a summary of the abatement potential.

Noise Sensitive Area	Barrier Limits	Attenuation
1	Barrier not feasible - sufficient continuous frontage for construction not available.	
2	24+50+ - 37+50+ R	6-10dBA
3	12+50 L - 23+00 L	6-10dBA
4	24+50 - 38+00 L	6-10dBA
6	56+00 - 65+00 R 67+25 - 74+25R	6dBA 6-10dBA
7	39+50 - 54+50L	6-10dBA
8	55+50 - 65+50 L 66+75 - 75+50 L	6-10dBA
9	76+50 - 89+00 L	6-10dBA
11	91+00 - 95+ 50 L	5dBA

A study of this tabulation shows that noise control is feasible for areas 2, 3, 4, ~~5~~, 7, 8, and 9. Attenuation at areas 6 and a portion of 11 would be limited to a maximum of 5-6dBA. This would occur in the mid-block area. Construction of a barrier with such limited attenuation is not considered a cost/effective approach. Both of the areas containing the Church of Christ and St. Patrick's Catholic Church will experience exterior noise levels exceeding the Federal design noise levels. However, no adverse impact on interior use of these structures is anticipated. Use of these churches does not coincide with peak traffic periods and it can be expected that exterior levels would be 3-4dBA less than during peak periods. This combined with a minimum 13dBA exterior/interior noise level reduction, based upon measurements, would result in L<sub>10</sub> interior noise levels a minimum of 15-17dBA less than the exterior L<sub>10</sub>.

74

Barriers would be between 6 and 10 feet in height. Further studies will be conducted to refine barrier material and height during the design stage.

Construction Impacts:

During the construction phases of this project, noise generated by construction equipment will impact noise sensitive areas previously discussed. Information regarding noise levels from construction equipment such as bulldozers, earthmovers, scrapers, etc, is limited and no prediction methods are currently available to assess the impact.

These levels are based upon limited measurement data and will vary depending on use and maintenance of equipment. There will be unavoidable periods of annoyance for the duration of the construction of this project.

Coordination with Local Officials:

A copy of the noise report will be forwarded to the following agencies, in order to inform them of impacts from traffic noise in the project area and efforts by the Maryland State Highway Administration to minimize these impacts.

City of Rockville Planning Commission  
111 South Perry Street  
Rockville, Maryland 20850

Housing Authority for Montgomery County  
County Office Building  
100 Maryland Avenue  
Rockville, Maryland 20850

Office of Community and Economic Development  
County Office Building  
100 Maryland Avenue  
Rockville, Maryland 20850

A copy of the full noise report is available at the State Highway Administration.

E. Natural Environment

The construction of the proposed highway improvement, particularly the relocation portion between Maryland Routes 115 and 609, necessitates the removal of some trees and shrubs and their replacement with protective vegetation appropriate to the stabilization requirements of slopes, fills and scenic qualities desired in the development of the facility. For safety reasons, a large oak tree and a large poplar tree will have to be removed.

The widening of 2.3 miles of Maryland Route 28 will not have a significant impact on fisheries and wildlife resources since the project site has been an already built-up and urbanized area.

The project will not have any impacts to wetlands or floodplains. No stream relocations will be required for this project.

The existing woods must be cleared in preparing cuts and fills, and stabilizing vegetation substituted over the prepared surfaces of the right of way. These surfaces will be landscaped and maintained to satisfy aesthetic requirements.

Generally, this means that a controlled system of functional plants are substituted for the existing progressions. This system may also serve the ecological functions of the displaced growth, providing shelter and food for small wild animals and birds, and blending with the undisturbed vegetation beyond the right of way. The project will not involve any stream crossings.

Chapter 245 of the Acts of 1970, Maryland General Assembly, requires construction contractors to obtain permits and approval from the appropriate public agencies for work such as borrow pits and waste area operations performed outside of the construction limits. The permits are predicated on treatment during and after completion of the grading. Borrow pits must be reseeded to return them to a natural state.

76

VI. COORDINATION AND CORRESPONDENCE

A. Notification and Review

1. Public Meeting

A Project Initiation Meeting for the subject project was held on July 29, 1974, in the Auditorium of the Rockville High School, located at the intersection of Baltimore Road and Twinbrook Parkway, commencing at 7:30 p.m.

The Project Initiation Meeting is the beginning of the involvement process by all interested persons who are or may be affected by the proposed improvements. In order to keep the concerned citizens well informed, the public informational package handout included a map of the study area, a copy of the Project Planning Activities Schedule and a form for written comments.

The purpose of the meeting was to inform the public of the start of this project. The Project Planning Team, which as composed of representatives from various Bureaus of the State Highway Administration, acquainted those in attendance with the project, described the scope of work and solicited comments relative to the preliminary study phase of the highway improvement. Included in the presentation was a brief explanation of the Action Plan and the public involvement process now undertaken for highway projects. Also, the project planning activities necessary to complete the study phase of the project were discussed through presentation of the Project Planning Schedule.

An Alternatives Public Meeting was held on July 22, 1976, at Rockville High School.

A detailed description of the project and the alternatives was presented. Most of the citizens comments generally supported the project.

2. Summary of Views Received and Responses

All interested persons were invited to attend the Project Initiation meeting and the Alternatives meeting to express their views. Comments and recommendations were noted and recorded during the course of the meeting. Forms for written comments were available at the meeting and could be submitted to the State Highway Administration for further consideration.

Since the success of this project would depend particularly on the cooperation of all those who may be closely affected by the proposed improvement, active citizen participation and involvement was requested to aid the study team. With these input data, areas which are sensitive to highway construction and future traffic volumes were identified. All efforts will be made to conflict as little as possible with these areas. Also, with this information, we can proceed with the study and analysis of the various alternates.

3. Public Hearing Comments

The Combined Location/Design Public Hearing was held on April 6, 1978 at the Rockville High School. Two alternates were presented for the portion of the project from Bauer Drive to Maryland 115. (Alternates 1 and 2). Three alternates were presented for the portion of the project from Maryland Route 115 to Maryland Route 97 (the at-grade intersection alternate and interchange alternate 2 and 3).

The substantive comments made at the hearing are summarized below and where applicable a response to the comment is provided. Complete comments are available for review in the Public Hearing Transcript which is available at the State Highway Administration.

COMMENT

Several people wanted Maryland Route 28 between Maryland Route 115 and Maryland Route 97 reconstructed along the existing corridor to allow access to businesses and to save on right of way and construction funds.

RESPONSE

As discussed in the Description of Alternates, (see page 20 ) a new alternate #2a, has been studied and selected for design from Maryland Route 115 to Maryland Route 97. This alternate is generally along the existing road and will allow access to the businesses in the area. Additional information concerning this alternate is located in Section IIB of this document.

COMMENTS

Several people commented on the placement and design of the proposed noise barriers and desired input into the design and placement.

76

RESPONSE

As the project moves to the design phase, the public will have the opportunity to meet with the State Highway Administration to discuss the design and appearance of the noise barriers.

COMMENT

There were several comments regarding the operation of the one-way service roads and if sidewalks are needed.

RESPONSE

The service roads between Bauer Drive and Maryland Route 115 will be one-way to provide increased safety and to accommodate the proposed bikeways. The area adjacent to the service roads will be graded to accommodate sidewalks. (see page 20 for additional discussion of service roads).

COMMENT

One resident commented on access from Manor Town Mutual Homes to Maryland Route 28.

RESPONSE

Access to Maryland Route 28 by Manor Town Mutual Homes is provided to be in the same location as is currently along existing Route 28.

Several written comments were also received which expressed ideas similar to the above comments which were expressed at the Public Hearing.

79

August 30, 1978

RE: Contract No. M 970-000-371  
Maryland Route 28 - From  
Bauer Drive to Maryland  
Route 609 east of Bradford  
Road

Mr. Richard J. Lynch, Director  
Montgomery County Department  
of Transportation  
6110 Executive Boulevard  
Rockville, Maryland 20850

Dear Mr. Lynch:

Thank you for your prompt reply to my July 13, 1978 letter concerning the service roads on our Maryland Route 28 project.

The Office of Planning and Preliminary Engineering concurs with the comments in your August 9, 1978 letter. As these recommendations are generally design in nature, they will be addressed in the design phase of the project.

By copy of this letter, I am forwarding your comments to the Chief Engineer requesting him to assure coordination with your department during the design phase.

Very truly yours,

ORIGINAL SIGNED BY:  
THOMAS L. CLOONAN

Hal Kassoff, Director  
Office of Planning and  
Preliminary Engineering

HK:bh

cc: Mr. Hugh G. Downs (w/attach.)  
Mr. Allen W. Tate  
Mr. David I. Curtin  
Mr. Eugene T. Caaponesci  
Mr. William F. Lins, Jr. (w/attach.)



# MONTGOMERY COUNTY, MARYLAND

ROOM 505 • 6110 EXECUTIVE BOULEVARD, ROCKVILLE, MARYLAND 20852 • 301 468-4042

August 9, 1978

Mr. Hal Kassoff, Director  
Office of Planning and  
Preliminary Engineering  
Maryland State Highway Administration  
Post Office Box 717  
300 West Preston Street  
Baltimore, Maryland 21201

Re: M 970-000-371; Maryland Route 28  
from Bauer Drive to Maryland  
Route 609 east of Bradford Road

Dear Mr. Kassoff:

We are writing in response to your letter of July 13, 1978 concerning the sub-  
ject project. We have reviewed the plans that you forwarded and our comments are  
as follows:

1. We concur with the proposed channelization at the intersection  
of Bauer Drive and Maryland Route 28.
2. We recommend that the channelization at the intersection of Rock  
Spring Drive and Maryland Route 28 be modified so as to curtail  
any through traffic movement on the service roads. For the west-  
bound traffic, the raised median at the intersection should be  
designed such that only right turns are possible. A similar  
treatment for the eastbound traffic on the service road approaching  
Nadine Drive is desirable though not critical due to relatively low  
volumes expected. However, a "bubble" should be provided in the  
northeast as well as in the southeast quadrant of this intersection  
to block through movement on the service roads and to create  
entrances to the service roads somewhat removed from the main inter-  
section. The proposed design is indicated on the plan attached.
3. At the intersection of Maryland 28 and Emory Lane - Bel Pre Road,  
the existing channelization in the southwest quadrant does provide  
for a mandatory right turn for eastbound traffic on the service  
road. In order to provide a more positive control for the through  
traffic on Maryland 28 desiring to enter the service roads, we  
recommend that entrances to the service roads in both directions be  
moved away from the intersection by providing "bubble" channelization  
in the northwest and southeast quadrants (see attached plan).

These indicate relatively low traffic volumes on Westbury  
Road. The channelization shown on the south leg of the intersection



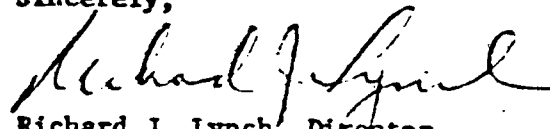
47

of Norbeck Road and Westbury Road appears to be too extensive. We recommend a single two-lane approach for the northbound traffic, with no median necessary.

5. The triangular island shown in the northwest quadrant of Hannans Way and Norbeck Road appears to be unnecessary. The estimated southbound right turning volumes do not warrant such an arrangement. We recommend elimination of the proposed island.
6. We concur with other elements of the plans. Also please note that we would be willing to accept the service roads into the County system upon completion of the project. We would like to review the expected revisions to this project for the section between Maryland 115 and Maryland 97 (including intersections) as soon as they are available.

We appreciate the opportunity to comment on these plans and similar matters of mutual concern. Please contact Mr. Zaki Sheikh of our staff if you have any questions regarding this matter.

Sincerely,

  
Richard J. Lynch, Director  
Department of Transportation

RJL:mmb  
Attachment

ACTION  INFO  SUSPENSE DATE \_\_\_\_\_ FILE \_\_\_\_\_  
 \_\_\_\_\_ Hunt \_\_\_\_\_ DeSantis \_\_\_\_\_ Hopkins  
 \_\_\_\_\_ Schneider  \_\_\_\_\_ Rodden \_\_\_\_\_ Jarata  
 \_\_\_\_\_ Helwig \_\_\_\_\_ O'H \_\_\_\_\_ Grandy \_\_\_\_\_ Koller  
 \_\_\_\_\_ Hoffman \_\_\_\_\_ Peabody \_\_\_\_\_ Hanrahan \_\_\_\_\_ Williamson  
 \_\_\_\_\_ \_\_\_\_\_ Honeywell \_\_\_\_\_

62

Maryland Historical Trust

July 17, 1978

Eugene T. Camponeschi  
 Bureau of Project Planning  
 State Highway Administration  
 Maryland Dept. of Transportation  
 300 West Preston Street  
 P. O. Box 717  
 Baltimore, MD 21203

Dear Mr. Camponeschi:

In response to your letter of June 29, 1978, concerning Maryland Route 28 (Bauer Drive to east of Bradford Road) the State Historic Preservation Office, after consideration of the reasoning in your letter, concurs with a determination of no effect on White's Hardware. In addition, the State Historic Preservation Office concurs that the property required for Alternate 2A does not possess historic significance and would also constitute a concurrence in a determination of no effect.

Sincerely,

*Nancy Miller*

Nancy A. Miller  
 Historian/Deputy State  
 Historic Preservation  
 Officer

NAM/pw..

cc: Ms. Eileen McGuckian  
 Mr. David F. Rinn

Shaw House 21 State Circle Annapolis Maryland 21401 (301) 269-2212, 269-2438  
 Department of State Planning and Development



# United States Department of the Interior

43

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

L7619(460)  
(ER 78/249)

MAY 18 1978

Mr. Emil Elinsky  
Division Administrator  
The Rotunda  
Suite 220  
711 West 40th Street  
Baltimore, Maryland 21211

Dear Mr. Elinsky:

This responds to your request for the Department of the Interior's comments on the draft Negative Declaration/Section 4(f) involvement for Maryland Route 28, Montgomery County, Maryland.

PRELIMINARY SECTION 4(f) COMMENTS

Since the subject document only discusses what might become a situation to which Section 4(f) would be applicable, we will try, in an effort to be helpful, to provide you an early indication of our thoughts and views.

Based on available information and assuming one of the construction alternatives is selected, we would concur that there are no feasible and prudent alternatives to the use of some land from the Norbeck Historical District for the proposed project. However, the draft Section 4(f) statement is inadequate in its discussion of measures to minimize harm caused by use of land in the historic district.

With regard to the several intersection design options that have been proposed, we agree with the comments of the State Historic Preservation Officer (page 78), that "the greater the amount of right-of-way requirements or impacts to structures, the more adverse the effect." Therefore, we recommend that serious consideration be given to selection of the At-Grade Intersection Alternative as a proper response to the second proviso of Section 4(f). The At-Grade Alternative requires considerably less land from the historic district than the other design options and will not require the removal of any historic structures.

Should one of the other intersection alternatives be selected, the Section 4(f) statement should document any unique problems associated with the At-Grade Alternative, and show that it is likely to involve costs or community disruption of extraordinary magnitude. Such a

Based on information from U.S. Department of the Interior, Heritage Conservation and Recreation Service, as well as the development of Alternat 2A, there is no longer a 4(f) issue involved in this project

showing should include a full discussion of traffic needs and a comparison of the ability of the several intersection design options to handle these needs, as well as a discussion of broader community factors, such as the use of energy, relative traffic safety, and cost of construction and maintenance associated with each option.

Should an alternative be selected that would require the removal of any historic structures, the final statement should include a commitment for full recordation of such structures to professional standards, as well as a commitment to move and restore such structures on a new site if such is considered appropriate by the State Historic Preservation Officer and the owners of the properties. Costs for such mitigation measures should be included as part of the project cost.

The Section 4(f) statement should also include and document any additional mitigation measures that may be agreed upon in consultation with the State Historic Preservation Officer, and with the Advisory Council on Historic Preservation pursuant to 36 CFR 800 if the historic district is determined to be eligible for inclusion in the National Register of Historic Places.

#### NEGATIVE DECLARATION COMMENTS

The present statement fails to evaluate energy consumption for each of the alternatives. We believe this energy consumption information is important to decisionmakers and recommend that it appear in the final Negative Declaration. We suggest that the views of the Federal Energy Administration on this matter be secured. The final Negative Declaration should fully document all required compliance with 36 CFR 800.

#### SUMMARY COMMENTS

The "Preliminary Section 4(f) comments" in this letter are provided to give you an indication of our thoughts about the 4(f) involvement of this project. They do not represent formal consultation with this Department pursuant to the requirements of Section 4(f) of the DOT Act. Such requirement would be fulfilled only when the Office of the Secretary, Department of the Interior, separately comments on any Section 4(f) statement for the selected alternative which may be prepared and approved by you for circulation.

As this Department has a continuing interest in the project, we are willing to cooperate and provide technical assistance in further project assessment and in the development of additional documentation for review. The Field Office assigned responsibility for such technical assistance is the Regional Director, Heritage Conservation and Recreation Service, 600 Arch Street, Philadelphia, Pennsylvania 19106, FTS 597-7990.

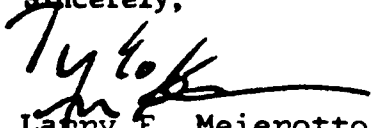
NOTE: The Build Alternates do not differ significantly as far as energy consumption is concerned. This is due to their similar capacities for handling traffic. Consumption would, however, be greater for the Selected Alternate than for the No-Build.

45

3

Thank you for the opportunity to offer these early comments.

Sincerely,



Larry E. Meierotto

Deputy Assistant SECRETARY

cc: Mr. Eugene T. Camponeschi  
Maryland State Highway Administration

86



# United States Department of the Interior

HERITAGE CONSERVATION AND RECREATION SERVICE  
WASHINGTON, D. C. 20240

IN REPLY REFER TO:

H32-NR

MAY 5 1978

Mr. Emil Elinsky  
Division Administrator  
Federal Highway Administration  
U.S. Department of Transportation  
711 West 40th Street  
Baltimore, Maryland 21211

Dear Mr. Elinsky:

Thank you for your letter requesting a determination of eligibility for listing in the National Register for the Norbeck Historic District in Montgomery County, Maryland, pursuant to Executive Order 11593 and the National Historic Preservation Act of 1966, as amended. Based upon the documentation you provided and on-site knowledge of the proposed district, we do not believe that a determination of eligibility for the area as a district is appropriate, because of the large number of intrusions and the extent of alteration done on many of the structures. However, because of visual knowledge of the area we would like to suggest individual requests for determinations of eligibility for the following properties: Whites Hardware Store, Burris House II, Mt. Pleasant Church and Norbeck Community Center. Following the guidelines provided in our regulations for requesting a determination of eligibility (36 CFR 63) on the Level of Documentation required please provide: (1) the historic name (or that of the original owner or builder) (2) location (3) classification (4) ownership (5) description (6) significance of the property (7) bibliography (8) geographical data (9) photographs and the names of individuals compiling the documentation. Should there be other properties of individual historical and architectural importance please do not hesitate to request a determination of eligibility on them.

We would also like to see more information on the post Civil War Black community of Mt. Pleasant with documentation such as early maps, property titles, or primary and secondary source references to the community so that we may advise you if a determination request is appropriate.

Should you have any questions, please do not hesitate to contact a member of my staff, Lucy Franklin at 202-523-5483.

Thank you for your interest in historic preservation.

Sincerely yours,

*Robert B. Pettig*

for William J. Murtagh  
Keeper of the National Register

NOTE: State Highway Administration studies have been modified based on this revised historical information (see pages 42 to 43).



MARVIN MANDEL  
GOVERNOR

MARYLAND  
DEPARTMENT OF STATE PLANNING

301 WEST PRESTON STREET  
BALTIMORE, MARYLAND 21201  
TELEPHONE 301 383-2451

January 18, 1974

Calvin W. Reese  
Paul M. Heid  
Henry Berger

1-23-74

VLADIMIR A. WAHBE  
SECRETARY OF STATE PLANNING  
EDWIN L. POWELL, JR.  
DEPUTY SECRETARY

Mr. Robert Hajzyk  
State Highway Administration  
300 West Preston Street  
Baltimore, Maryland 21401

RECEIVED

JAN 22 1974

SUBJECT: PROJECT NOTIFICATION AND REVIEW

PLANNING DEPARTMENT

Applicant: State Highway Administration

Project: Md. Rt. 28 - Bauer Drive to Md. Rt. 97  
Hardship and Protective Buying Acquisition

Funds: Federal - \$1,144,500; State - \$490,500

State Clearinghouse Control Number: 73-12-739

State Clearinghouse Contact: Warren D. Hodges (383-2467)

Dear Mr. Hajzyk:

The State Clearinghouse has reviewed the above project. In accordance with the procedures established by the Office of Management and Budget Circular A-95, the State Clearinghouse received comments (copies attached) from the following:

The Department of Natural Resources: does not object to the project provided it does not commit the Department's concurrence with alignment of any future highway.

The Interagency Committee for Public School Construction: expressed no interest in the project.

Our staff in its review of the project, recommended that consideration be given to the possibility of utilizing feeder bus operations to the METRO rapid transit station in accordance with the improvements to Maryland Route 28.

As a result of the review, it has been determined that the proposed project is not inconsistent with State plans, programs, and objectives as of this date.

A copy of this letter must be attached to your formal application. The comments contained herein are valid for a period of two years from the date of this letter. If application for funding is not submitted within this period of time, the project must be resubmitted to the State Clearinghouse for updating of the comments. If you have any questions, please contact the State Clearinghouse member named above.

NOTE: Bus operations currently exist along Maryland 28 and it is anticipated that this will also

service Metro.  
cc: Anthony Adams  
Alford Garey

Sincerely,

Vladimir A. Wahbe

88

VII. APPENDIX



ASSESSMENT OF SIGNIFICANT ENVIRONMENTAL EFFECTS

89

The following questions should be answered by placing a check in the appropriate column(s). If desirable, the "comments attached" column can be checked by itself or in combination with an answer of "yes" or "no" to provide additional information or to overcome an affirmative presumption.

In answering the questions, the significant beneficial and adverse, short and long term effects of the proposed action, on-site and off-site during construction and operation should be considered.

All questions should be answered as if the agency is subject to the same requirements as a private person requesting a license or permit from the State or Federal Government.

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u>
A. Land Use Considerations			
1. Will the action be within the 100 year flood plain?	___	<u>X</u>	___
2. Will the action require a permit for construction or alteration within the 50 year flood plain?	___	<u>X</u>	___
3. Will the action require a permit for dredging, filling, draining or alteration of a wetland?	___	<u>X</u>	___
4. Will the action require a permit for the construction or operation of facilities for solid waste disposal including dredge and excavation spoil?	___	<u>X</u>	___
5. Will the action occur on slopes exceeding 15%?	___	<u>X</u>	___
6. Will the action require a grading plan or a sediment control permit?	<u>X</u>	___	___
7. Will the action require a mining permit for deep or surface mining?	___	<u>X</u>	___
8. Will the action require a permit for drilling a gas or oil well?	___	<u>X</u>	___
9. Will the action require a permit for airport construction?	___	<u>X</u>	___
10. Will the action require a permit for the crossing of the Potomac River by conduits, cables or other like devices?	___	<u>X</u>	___

90

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u>
11. Will the action affect the use of a public recreation area, park, forest, wildlife management area, scenic river or wildland?	---	<u>X</u>	---
12. Will the action affect the use of any natural or man-made features that are unique to the county, state or nation?	---	<u>X</u>	---
13. Will the action affect the use of an archaeological or historical site or structure?	---	<u>X</u>	---
<b>B. Water Use Considerations</b>			
14. Will the action require a permit for the change of the course, current, or cross-section of a stream or other body of water?	---	<u>X</u>	---
15. Will the action require the construction, alteration or removal of a dam, reservoir or waterway obstruction?	---	<u>X</u>	---
16. Will the action change the over-land flow of storm water or reduce the absorption capacity of the ground?	---	<u>X</u>	---
17. Will the action require a permit for the drilling of a water well?	---	<u>X</u>	---
18. Will the action require a permit for water appropriation?	---	<u>X</u>	---
19. Will the action require a permit for the construction and operation of facilities for treatment or distribution of water?	---	<u>X</u>	---
20. Will the project require a permit for the construction and operation of facilities for sewage treatment and/or land disposal of liquid waste derivatives?	---	<u>X</u>	---
21. Will the action result in any discharge into surface or sub-surface water?	---	<u>X</u>	---

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u> 91
22. If so, will the discharge affect ambient water quality parameters and/or require a discharge permit?	___	<u>X</u>	___
<b>C. Air Use Considerations</b>			
23. Will the action result in any discharge into the air?	<u>X</u>	___	See Pg. 46
24. If so, will the discharge affect ambient air quality parameters or produce a disagreeable odor?	___	<u>X</u>	___
25. Will the action generate additional noise which differs in character or level from present conditions?	<u>X</u>	___	See Pg. 50
26. Will the action preclude future use of related air space?	___	<u>X</u>	___
27. Will the action generate any radiological, electrical, magnetic, or light influences?	___	<u>X</u>	___
<b>D. Plants and Animals</b>			
28. Will the action cause the disturbance, reduction or loss of any rare, unique or valuable plant or animal?	___	<u>X</u>	___
29. Will the action result in the significant reduction or loss of any fish or wildlife habitats?	___	<u>X</u>	___
30. Will the action require a permit for the use of pesticides, herbicides or other biological, chemical or radiological control agents?	___	<u>X</u>	___
<b>E. Socio-Economic</b>			
31. Will the action result in a pre-emption or division of properties or impair their economic use?	___	<u>X</u>	___

92

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u>
32. Will the action cause relocation of activities, structures or result in a change in the population density or distribution?	___	<u>X</u>	___
33. Will the action alter land values?	___	<u>X</u>	___
34. Will the action affect traffic flow and volume?	<u>X</u>	___	See Pg. 20 & 33
35. Will the action affect the production, extraction, harvest or potential use of a scarce or economically important resource?	___	<u>X</u>	___
36. Will the action require a license to construct a sawmill or other plant for the manufacture of forest products?	___	<u>X</u>	___
37. Is the action in accord with federal, state, regional and local comprehensive or functional plans--including zoning?	<u>X</u>	___	___
38. Will the action affect the employment opportunities for persons in the area?	___	<u>X</u>	___
39. Will the action affect the ability of the area to attract new sources of tax revenue?	___	<u>X</u>	___
40. Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocate elsewhere?	___	<u>X</u>	___
41. Will the action affect the ability of the area to attract tourism?	___	<u>X</u>	___
F. Other Considerations			
42. Could the action endanger the public health, safety or welfare?	___	<u>X</u>	___
43. Could the action be eliminated without deleterious effects to the public health, safety, welfare or the natural environment?	___	<u>X</u>	___

93

	<u>Yes</u>	<u>No</u>	<u>Comments Attached</u>
44. Will the action be of statewide significance?	—	<u>X</u>	—
45. Are there any other plans or actions (federal, state, county or private) that, in conjunction with the subject action could result in a cumulative or synergistic impact on the public health, safety, welfare or environment?	—	<u>X</u>	—
46. Will the action require additional power generation or transmission capacity?	—	<u>X</u>	—

G. Conclusion

17. This agency will develop a complete environmental effects report on the proposed action.	—	<u>X</u>	A Negative Declaration has been prepared.
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