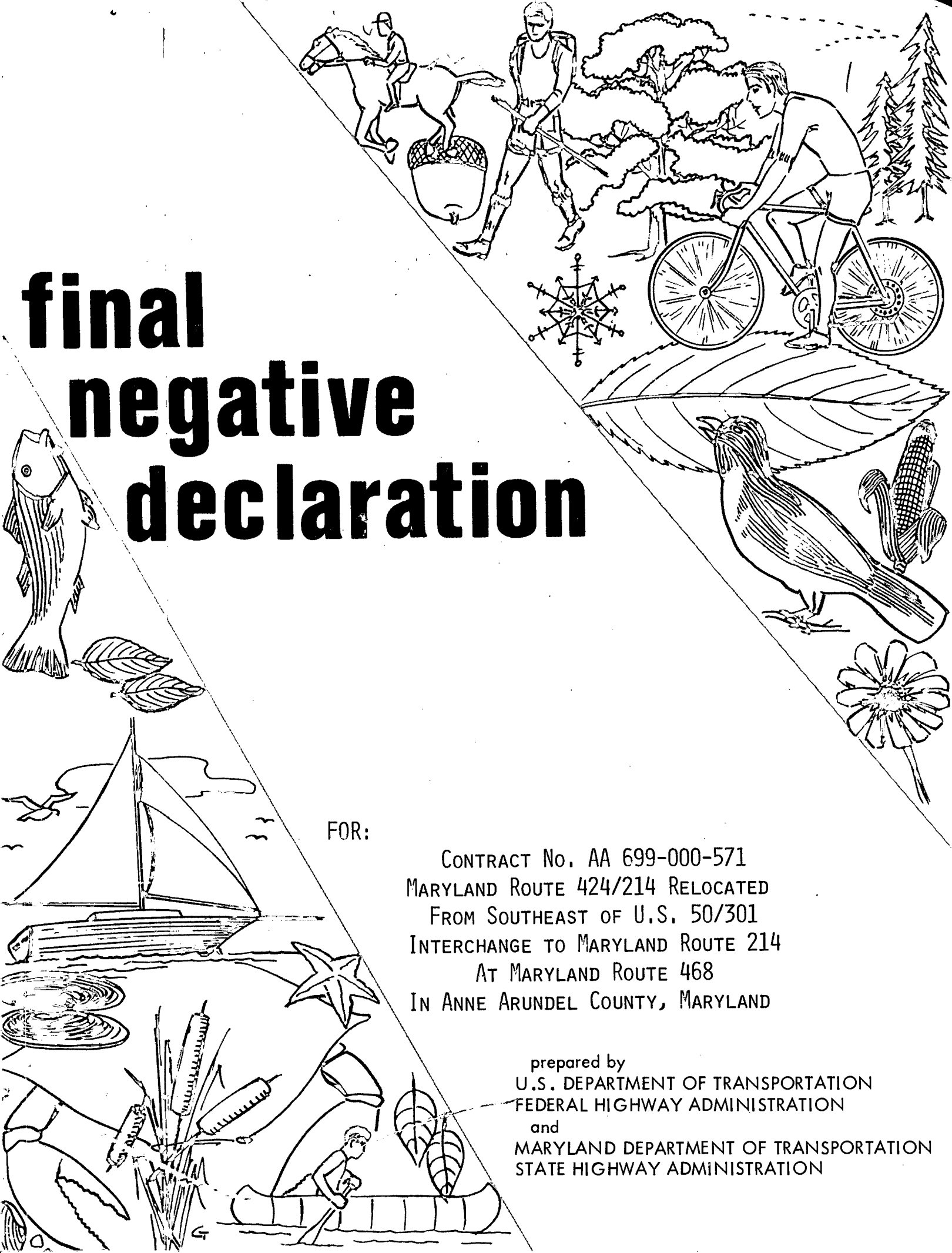

final negative declaration

FOR:

CONTRACT No. AA 699-000-571
MARYLAND ROUTE 424/214 RELOCATED
FROM SOUTHEAST OF U.S. 50/301
INTERCHANGE TO MARYLAND ROUTE 214
AT MARYLAND ROUTE 468
IN ANNE ARUNDEL COUNTY, MARYLAND

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

REPORT NUMBER: FHWA-MD-NEG-79-07-F

FEDERAL HIGHWAY ADMINISTRATION

REGION III

Maryland Route 424/214 Relocated
Southeast of U.S. Route 50/301 Interchange
To Maryland Route 214 at Maryland Route 468
Anne Arundel 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

12/24/80 by: Hal Kassoff
Date

Hal Kassoff, Director
Office of Planning and
Preliminary Engineering

1/15/81 by: Emil Elinsky
Date

Emil Elinsky
Division Administrator
Federal Highway Administration

TABLE OF CONTENTS

4

LIST OF FIGURES

LIST OF TABLES

Summary

(1.) Federal Highway Administration

( ) Environmental Impact Statement (x) Negative Declaration

( ) Draft (X) Final

( ) Section 4(f) Involvement

(2.) Individuals who can be contacted for additional information concerning the proposed project and this Document.

Mr. William F. Schneider, Jr.
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.

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.

(3.) Description of Action

The proposed action involves the improvement on the existing alignment of approximately 2.5 miles of Maryland Route (Md) 424 from the intersection of Rutland Road to Md 214 at Davidsonville and 4.7 miles of Md 214 from Md 424 at Davidsonville to Md 468 at Collison

(3.) Description of Action - cont'd

Corner in Anne Arundel County. The objective of the project is to provide an improved facility linking U.S. 50/U.S. 301 with the populated area of the Mayo Peninsula, and to improve traffic conditions and reduce the area accident rate.

(4.) Summary of Environmental Impacts

The proposed improvements to 424 and 214 will provide a more direct access link from areas of high population density to the major traffic corridors in an effort to bypass present areas of commercial and residential development. At the present time, problems of traffic service and safety occur due to traffic volumes, inadequate road geometry and road disrepair. Completing a major upgrading of the two roads will have a significant beneficial effect on accident rates and travel time.

Improvement of traffic service on existing Md 214 by widening the existing road will have a beneficial effect on access to present and proposed commercial establishments and the extensive school system in the final stage of completion in the eastern area of the project. The improved safety for travel and left turns will be particularly important to school buses associated with the school complex.

Relocation of three families (owner-occupants) and three businesses will be required. No farms or minority communities will be affected.

No property associated with any historically significant cultural site will be affected by the selected alternate. No publicly owned recreational area will be taken and no threatened or endangered species habitat will be affected by the action.

Noise projections indicate that the selected alternate will increase noise levels at adjacent residential structures, in some cases in excess of Federal design noise levels. Abatement in the form of noise barriers would be ineffective due to frequent openings required to permit access to adjacent land uses. Other types of mitigation were investigated and are discussed in Section IV.

The air analysis completed indicates there will be no violations of the National Ambient Air Quality Standards and the project is consistent with State Implementation Plan.

Water resources will not experience significant impacts either by physical modification or changes in quality. No significant infringement on the 100 year floodplain will occur with the selected alternate.

The proposed project is in accordance with the proposed land use of the Baltimore Regional Planning Council and Anne Arundel County.

Prior to construction of the proposed project, a permit will be required from the Maryland Department of Natural Resources. Also, Section 404 permits will be required from the Corps of Engineers.

(5.) The Selected Alternate (Alternate B)

Improvement of Maryland 424 by widening the existing two lanes, adding shoulders and improving the road geometry. Improvements of of Maryland 214 to a four-lane facility for a total of 10.6 miles.

(6.) Other Major Alternatives Considered

Alternate A

Construction of a new four-lane limited access facility from the intersection of Maryland 424 and Rutland Road south of the Maryland 424/U.S. 50 interchange directly to Collison Corner, a total of 5.9 miles.

Alternate C

Improvements to Maryland 424 from Rutland Road to Davidsonville and Md. 214 from Davidsonville to a point approximately 7,500 feet west of the intersection with Md. 2. A new four-lane facility would have been constructed from this point to Collison Corner.

Alternate D

Construction of a new four-lane facility from the intersection of Md. 424 and Putland Road to Md. 214 approximately 7,000 feet west of the intersection with Md. 2. An upgrading of Md. 214 from this point eastward to Collison Corner was proposed.

Alternate E

This alternate involved the "no build" choice and would consist of not making major improvements to the existing roadway. Normal maintenance procedures would continue and spot safety improvements would have been undertaken where appropriate.

General public opinion favored either Alternate B or E. Alternates A, C, and D, while providing higher degrees of solution to the problem, would have been significantly

(6.) Other Major Alternatives Considered - cont'd

more costly as well as having greater negative environmental effects. Alternate E provides no improvement to the existing or projected problems.

(7.) Minor Alternatives Considered

In conjunction with the development of Alternates A and D, the resulting impacts of construction of interchanges with grade-separations vs. construction of at-grade intersections at the following locations, were investigated:

Rutland Road

Riva Road

Additionally, the construction of an at-grade intersection in conjunction with some minor realignment of Beards Point vs. the construction of an overpass for Beards Point Road, was investigated at that location.

I. Location and Description of Project

A. Location of Project

1. General Description of Project Area

The project area is located approximately between six to nine miles southwest to west of Annapolis, Maryland. The majority of the project is in Assessment District No. 1 with only a small portion being is Assessment District No. 2, both in Anne Arundel County, Maryland (Figure 2). Regionally, the project area is approximately 30 miles south of Baltimore and 20 miles east of Washington, D.C. (Figure 1)

The area at present is a mixture of rural and suburban land uses. Formerly completely rural, the area has seen the development of subdivisions in recent years as well as the erection of an increasing number of homes on individual lots. The area's nearness to major employment centers in Annapolis, Baltimore and Washington, and the nearby recreational opportunities afforded by Chesapeake Bay make the area a prime location for suburban homesites.

In 1975, the total population of Anne Arundel County was 342,700. [1/] The population in 1975 of Assessement District 1 was 15,477 and Assessment District 2 was 35,600. [2/] In both cases, the greatest population density is closer to Annapolis and the project area is generally sparsely

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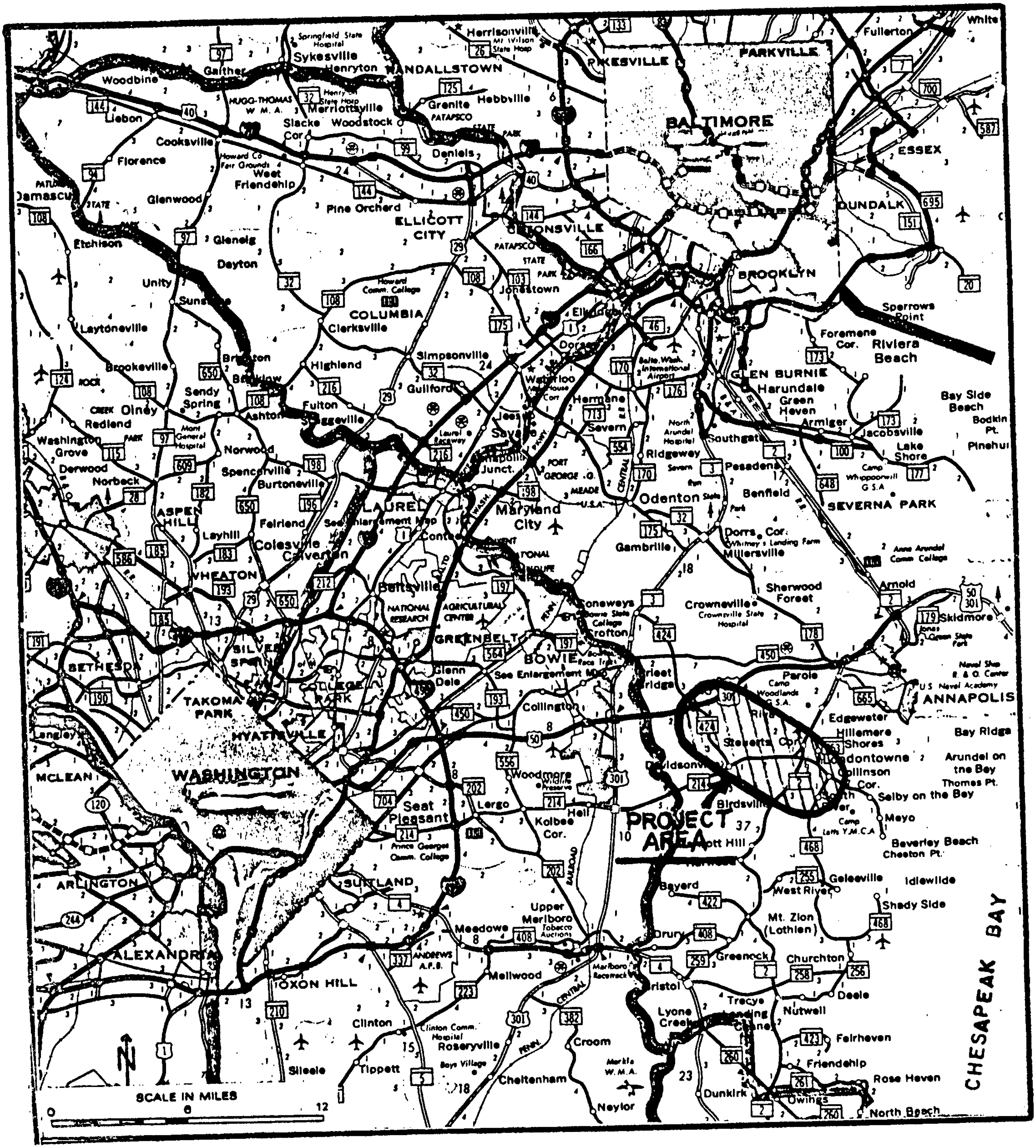
1/ Anne Arundel County Office of Planning and Zoning

2/ Population, Housing Income, Employment Summary Statistics October 1976, Anne Arundel County



REGIONAL MAP

FIGURE 1

1. General Description of Project Area - cont'd

settled. For the county as a whole, the 1978 population was 80.8% greater than the 1960 population and exhibits a linear trend from 1950 to 2000.[1/] The study area (Figure 2) is served by U.S. Route 50 and 301 and Md 2 which are major state highways as well as by Md 424 and 214 and several local roads. In the project area, only U.S. Route 50 and 301 has more than two lanes and access control. There is no rail service (freight or passenger) and frequent scheduled bus service is not available. A small general aviation field, Lee Airport, with one runway is the only airport in the area.

In the past, the economy of the area was based predominantly on commercial fishing and agriculture. Both activities have declined and most who live in the area commute to work in the Annapolis, Baltimore or Washington areas. There is no manufacturing activity in the immediate area.

Natural characteristics of the area include a rolling topography with some steep slopes. Most of the area is wooded although some farmland, both active and abandoned, is present. Flat Creek, Beards Creek, and Glebe Branch drain the area.

1/ Anne Arundel County Office of Planning and Zoning

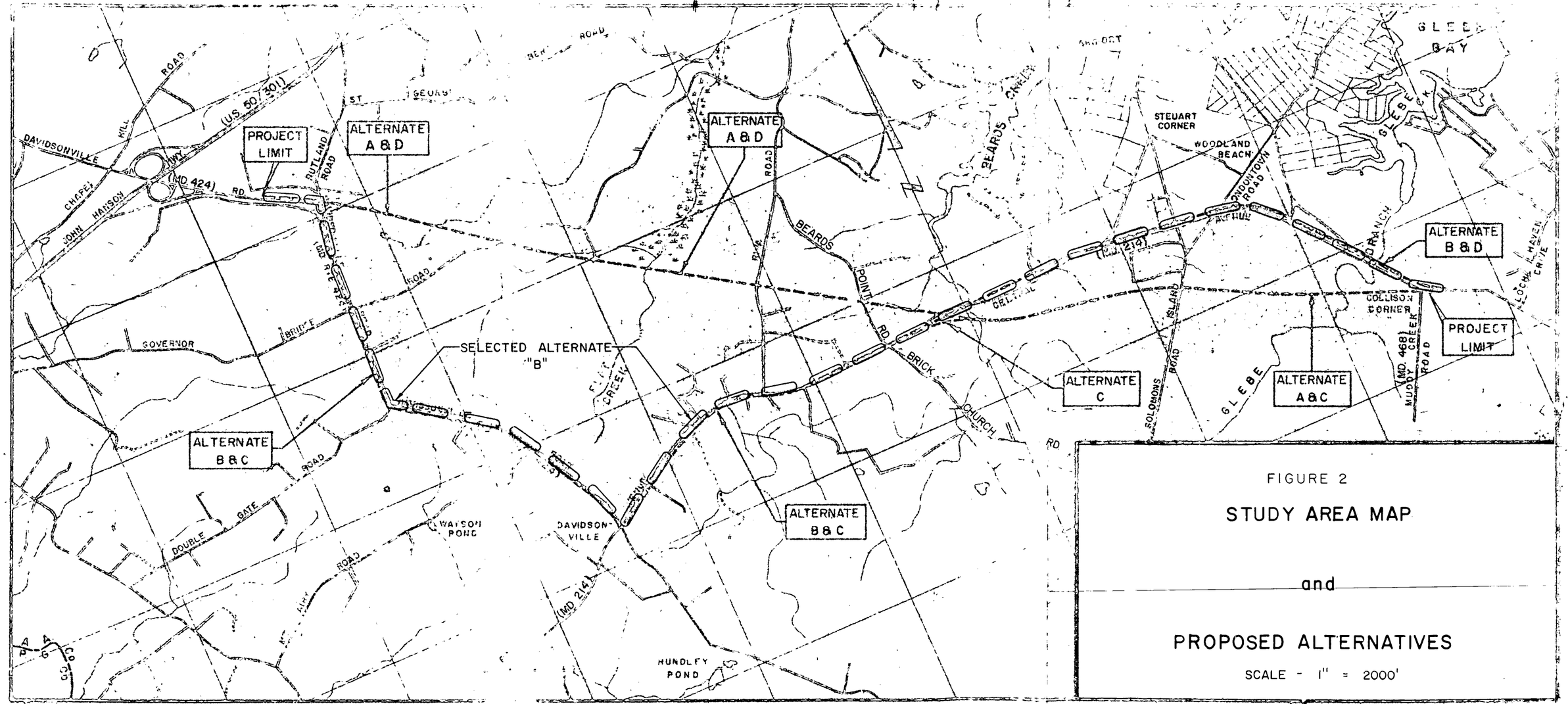


FIGURE 2

STUDY AREA MAP

and

PROPOSED ALTERNATIVES

SCALE - 1" = 2000'

2. Existing Environmental Conditions in Project Area

a. Geology, Topography, Soils

Geology -- Anne Arundel County lies within the Coastal Plain Physiographic Province on the western shore of Chesapeake Bay. Subsurface material consists of unconsolidated Cretaceous deposits of clay, silt, and gravel and glauconitic, argielaceous sand, indicating a marine origin. Tidal areas within the project area are underlain by the more recent deposits of the Eocene period. Below the approximately 1000 feet Cretaceous group are deposits of Paleozoic and pre-Cambrian crystalline complexes.

Topography -- Topography of the project area varies from nearly flat in the southeastern corner to moderate slopes in the central and northwestern area of the project area. Slopes of 20% are rare and of short length. Much of the difference in relief in the project area is a result of stream erosion of the upland plain. Elevations range from less than 20 feet above mean sea level where Md 214 crosses Glebe Branch to over 180 feet at the junction of Md 214 and Md 424.

Soils -- Soils in the study area are comprised primarily of Monmouth and Collington soils with numerous lesser types. Most soils are well suited for tobacco production and other agricultural usage, but farming

a. Geology, Topography, Soils - cont'd.

comprises less than 25 percent of the area land activity. Engineering characteristics include a moderate to severe erosion potential and ground water tends to be less than five feet in depth. Designation of prime agricultural land by the U.S.D.A. Soil Conservation Service includes approximately one half the area, but no designated unique soils are present.

Detailed information is available on study area soils at the Maryland State Highway Administration (MSHA).

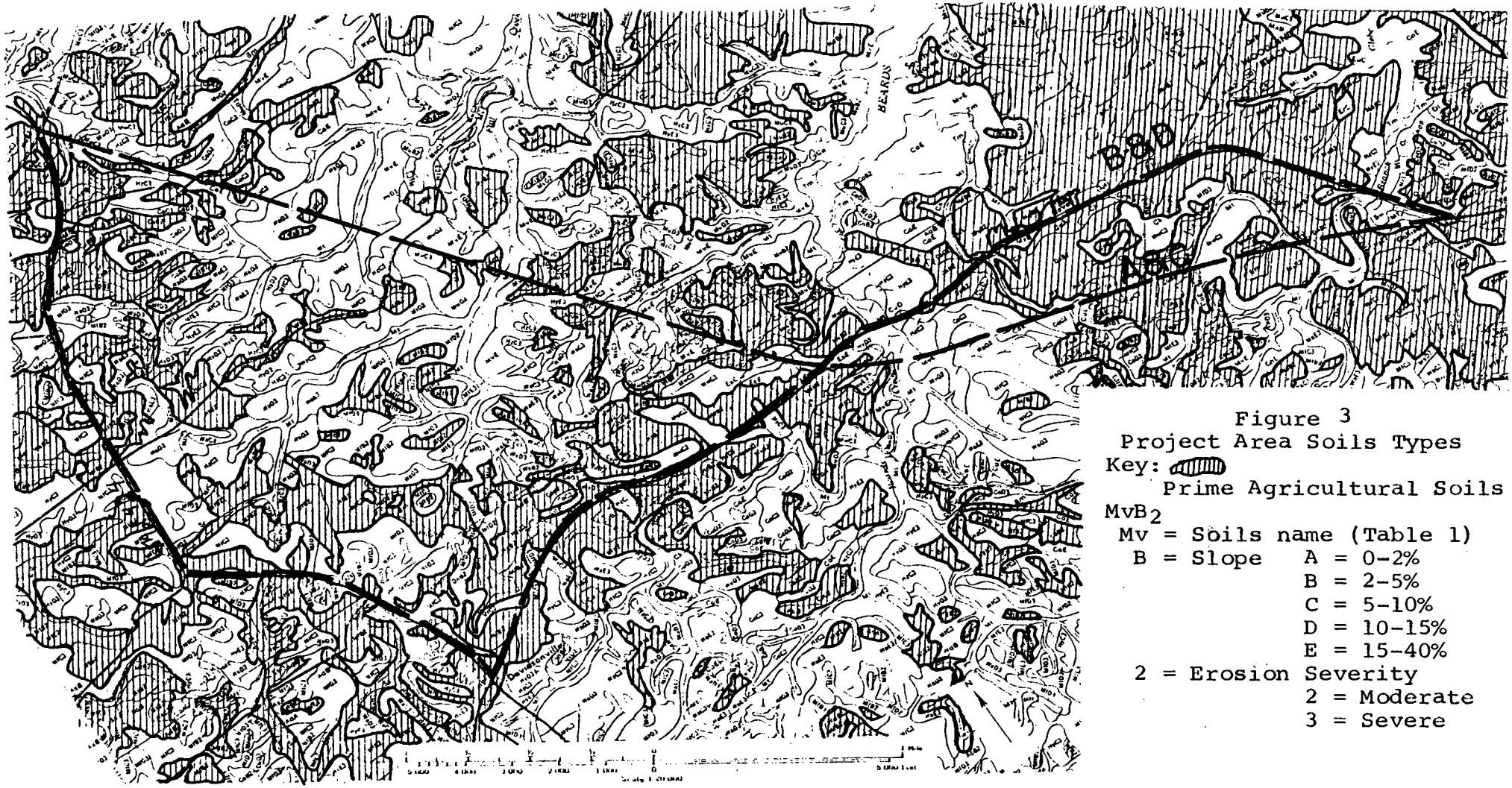


Figure 3
Project Area Soils Types
Key:
Prime Agricultural Soils

MvB_2
Mv = Soils name (Table 1)
B = Slope
A = 0-2%
B = 2-5%
C = 5-10%
D = 10-15%
E = 15-40%
2 = Erosion Severity
2 = Moderate
3 = Severe

b. Vegetation

Anne Arundel County lies within the Central Hardwood forest region, and the immediate project is designated by the Maryland Department of Natural Resources as a Tulip Poplar association. While lumbering operations, a significant economic feature in the area, have left no virgin forests in the County, a significant amount of the study area remains in an undeveloped, wooded condition. These forests and old field communities are the two types of vegetative ecosystems in the immediate project area. A listing of vegetation in the study area is available for review at the MSHA.

The Compendium of Natural Features Information prepared by the Maryland Department of State Planning in cooperation with the Smithsonian Institute for Natural Areas indicates areas along Flat Creek and Beards Creek as freshwater marshes. Field investigations indicate that wetlands associated with Flat Creek do not extend into the study area and those associated with Beards Creek begin 2000 feet downstream from the nearest alternate and extend downstream to its mouth.

Upstream from the Beards Creek wetlands and along the banks of Glebe Branch, vegetative species are primarily similar to those described for the upland forests with a

b. Vegetation - cont'd

greater percentage of birch and red maple indicative of wetter conditions. These wetter conditions also result in a more dense understory with a greater abundance of ferns and herbaceous plants.

In the project area, vegetation along the banks of Flat Creek is more indicative of upland conditions.

The Maryland DNR indicate three naturally significant areas (No's. 2800, 3000 and 3400) in the project vicinity. They are shown on Figure 4 and the DNR description is included in the Appendix.

No threatened or endangered species are known or expected to exist in the project area.

c. Wildlife

Terrestrial -- Listings of mammals and birds that are common and likely to be found in the study area are available at MSHA.

The extensive woodlands and old field communities of the project area, particularly the prime natural areas mentioned in the preceding section, provide excellent habitat for the project area mammals and birds. Lumbering and clearing operations have helped by removing enough of the original canopy to allow the development of ground and shrub species necessary for animal food and shelter. Farming operations have also assisted in wildlife maintenance by providing readily accessible food supplies. Information from the Maryland Department of Natural Resources indicates that squirrels are found to be particularly abundant along the Flat Creek and Beards Creek & Glebe Branch, the three prime natural areas.

Major game animals are not particularly abundant because of surrounding development. Some deer can be found in the wooded and marginal areas, but the numbers are limited. Most hunting is restricted to grey squirrel, quail, rabbit and water fowl.

Birds common to the project area are listed at the MSHA office. The list includes resident and migratory species, though only the former are generally disturbed

c. Wildlife - cont'd.

by localized development. Some species common to wetland areas have been included, due to the proximity of Beards Creek marsh, though proposed alignments generally only affect small freshwater streams. Wood ducks are found in moderately sized populations in the Flat Creek and Beards Creek watersheds.

Aquatic -- Streams in the project area include branches of Flat Creek, Beards Creek immediately upstream from the tidal marsh area, and a portion of Glebe Branch. Flat Creek and Glebe Branch are shallow and narrow with dense vegetation on the banks. The Maryland Department of Natural Resources completed a study of Beards Creek during 1978. Results show that 10 different fish species were identified with the American Eel being the most abundant. Information on species type is available at MSHA office.

Non-fish species reported along Beards Creek include frogs, crayfish, salamanders, and snakes. Species identification are available at the MSHA office.

Elctrofishing results available from Maryland DNR indicate the presence of white and yellow perch, considered anadromous and the American Eel a catadromous species.

Information from Maryland Department of Natural Resources indicates no threatened or endangered species are known or expected to have habitat in the project area.

d. Historic and Archeological Sites

Historical Sites -- Coordination with the Maryland Historical Trust indicates the following structures in the project area:

159 - Old Davidson House - 19th Century

160 - Mt. Airy (National Register) - 19th Century

162 - Countess - 19th Century

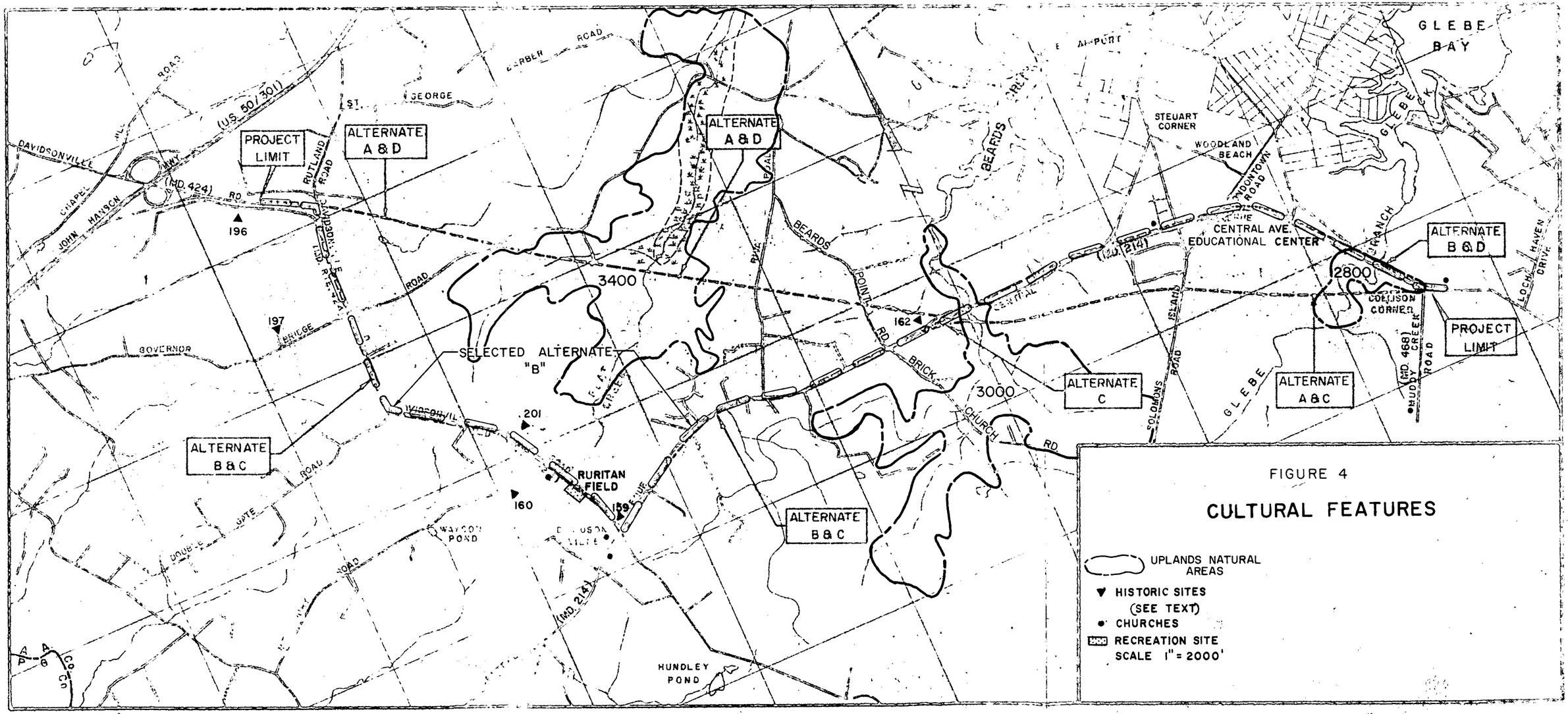
197 - Willow Glen - 18th and 19th Century

201 - Vitzthum House - 19th Century

196 - Locust Farm - 19th Century

All are proximate to existing Routes 424 and 214. The State Historic Preservation Officer has determined that there will be no impact to any historically associated property for any site of historical significancy by any of the alternates. See the letter in the Concurring Statements section dated April 5, 1979 from the Maryland Historical Trust.

Archeological Sites -- An archeological reconnaissance was conducted by the Division of Archeology, Maryland Geologic Survey to locate sites potentially affected by the proposed project. The report and maps are available at the MSHA and interested parties can peruse the results on an "as-needed-basis." In general, due to the importance and vulnerability of archeological sites, the state archeologist has requested that the locations not be published.


PROJECT LIMIT
ALTERNATE A&D
ALTERNATE A&D
SELECTED ALTERNATE "B"
ALTERNATE B&C
ALTERNATE B&C
ALTERNATE C
ALTERNATE A&C
ALTERNATE B&D
PROJECT LIMIT
RURITAN FIELD
CENTRAL AVE. EDUCATIONAL CENTER
GLEBE BAY
STEUART CORNER
WOODLAND BEACH
COLLISON CORNER
HUNDLEY POND
WAYSON POND
DAVIDSONVILLE
JOHN HANSON HWY
(MD. 424)
(US. 50/301)
RUTLAND ROAD
GOVERNOR BRIDGE ROAD
DOUBLE GATE ROAD
BEARDS POINT RD.
BRICK CHURCH RD.
SOLOMONS ISLAND ROAD
(MD. 214)
MUDDY CREEK ROAD
LOCH HAVEN DRIVE
3400
3000
2800
196
197
201
162
160
159
FIGURE 4
CULTURAL FEATURES
UPLANDS NATURAL AREAS
HISTORIC SITES (SEE TEXT)
CHURCHES
RECREATION SITE
SCALE 1" = 2000'

d. Historic and Archeological Sites - cont'd

The reconnaissance located one prehistoric site in the vicinity of a tributary to Flat Creek area with artifacts indicating a temporary camp site. No other sites were located "despite excellent surface conditions in areas appearing to be favorable for site location." No further archeological work was recommended. None of the sites will be impacted by the selected alternate.

e. Parks and Recreational Areas

Ruritan Field, a privately owned park, located on the west side of Md 424 approximately 1800 feet north of the intersection of Routes 424 and 214 in Davidsonville, is the only recreation area in the vicinity of the proposed project. It is about two acres in size and the facilities consist of a baseball backstop and a small trailer-mounted concession stand (Figure 4).

There are no other parks in the study area.

f. Climate and Air Quality [1/]

Anne Arundel County lies in a region midway between the rigorous climate of the North and the mild climate of the South. Since the County is located in the middle latitudes where the atmospheric flow is from west to east across North America, it has a continental type climate with four well defined seasons. However, the Chesapeake Bay and its tributaries have considerable modifying control on its climate, especially in moderating extreme temperatures of nearby areas.

Precipitation is rather evenly distributed through the year with August the wettest month (4.5 inches) and February the driest (2.57 inches). Monthly average temperatures vary from 69.8°F. in July to 29.2°F. in February with a yearly average of 48°F. Thunderstorms occur on an average of thirty-one days per year, mostly from May through August.

Prevailing winds are from the west to northwest except during the warm months when they become more southerly. The windiest period is late winter and early spring. Dangerous and damaging storms, such as tornadoes, hurricanes, and blizzards, are infrequent.

1/ Office of Climatology, Department of Agronomy, University of Maryland, College Park, Maryland

f. Climate and Air Quality - cont'd.

The background concentrations for carbon monoxide used for projections later in this report are found in the following table. They were calculated by the Maryland State Highway Administration, and incorporated into this report. Information on methods of measurement and analysis are available in a technical report available from the MSHA.

BACKGROUND CARBON MONOXIDE - ppm

	One Hour	Eight Hour
1976	3.0	2.5
1985	1.8	1.5
2005	1.0	0.8

These data are significantly below the one-hour (35 ppm) and the eight-hour (9 ppm) National Ambient Air Quality Standards.

g. Noise Levels

A field monitoring program was conducted by the Maryland State Highway Administration in an effort to determine existing noise conditions in the study area. Field methods and results were described in a special report that is available for review at the MSHA.

A total of forty-nine sites were selected and include various houses near the existing road and proposed alternates as well as area churches and the new school complex. The sites were selected based on potential noise impacts from the alternates. Site locations and descriptions are available in the technical report. (See Section 4D).

Recorded values ranged from 43 dBA (very quiet) to 75 dBA, with most areas experiencing noise levels of 58 - 69 dBA. Three sites were found to be experiencing levels in excess of Federal design noise levels (70 dBA maximum for residences). No particular peaks of noise were identified and no noise sources other than traffic were identified.

h. Water Resources

The project area lies on the west bank of the South River a major tributary to the Chesapeake Bay. Existing Md 424 follows a ridge that separates the South River and Patuxent River basins. Md 214, proceeding eastward from Davidsonville first parallels one of the South River tributaries and then crosses a number of streams as the road approaches Collison Corner (Figure 5).

The project area surface waters are protected by the State of Maryland with established quality criteria under Title 8 of the Natural Resources Article. The streams are all classified as Class I waters meaning that they are protected for water contact recreation, fish, other aquatic life, wildlife, public water supply (with treatment by filtration and disinfection), agricultural water supply, and industrial water supply. The criteria for Class I waters are listed in Table 1.

Water quality was sampled at five locations (Figure 5) during a field visit in August, 1975, and tests were performed by minor modifications of procedures outlined in Standard Methods. Parameters correspond to standards established for the project area surface waters or those that are particularly sensitive to highway construction or use. Results are outlined in Table 1. No

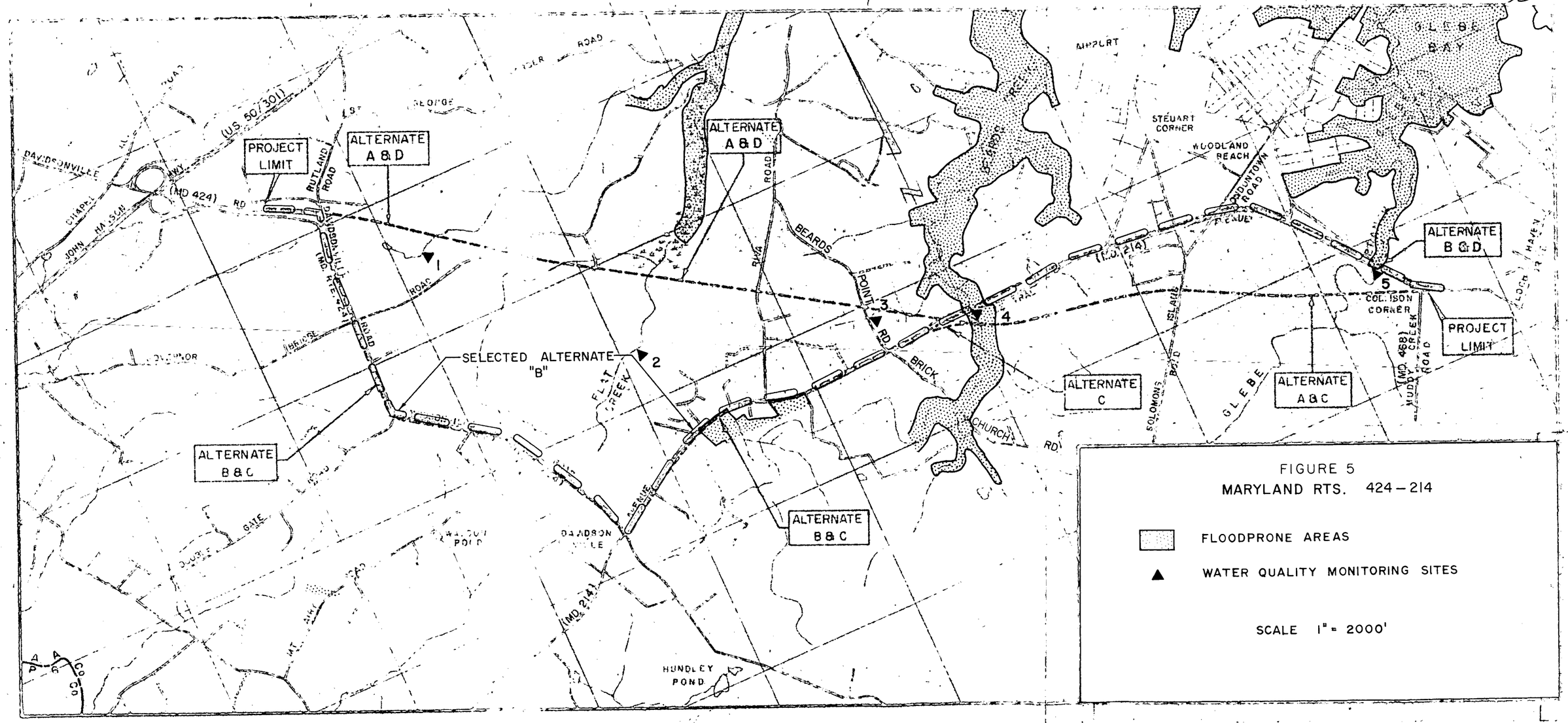


FIGURE 5
MARYLAND RTS. 424 – 214

Table 1

FIELD WATER QUALITY RESULTS
(August 12, 1975)

	Flat Cr. Tributary 1.	Flat Creek 2.	Beards Cr. Tributary 3.	Beards Creek 4.	Glebe Branch 5.	Standard
Temperature (^{o}C)	19	19	17	19	20	32.2 /1.
Dis. Oxygen (mg/1)	5	6	4	5	4	4 /1.
pH	6.55	7.12	5.80	6.87	6.35	6.5-8.5 /1., 3
Conductivity (mhos)	150	210	65	145	130	
Iron (mg/1)	1.05	1.6	.75	1.8	2.0	1.5 /2.
Turbidity (JTU)	13	22	5	30	30	150 /1.
Chlorides (mg/1)	15	20	5	17	20	50-250 /2.
Color (units)	40	60	25	80	70	

/1. Established by Md D.N.R.
/2. Suggested by E.P.A.
/3. Or natural levels

Class I Waters

Groundwater Appropriations 16 permits
Residents on wells

No surface water appropriation permits

No discharge permits in immediate streams in question

h. Water Resources - cont'd

historical data can be found for the project area streams from various responsible agencies.

The western portion of the project area, between Rutland and Riva Roads, is drained by three tributaries forming Flat Creek. The main stem appears to parallel Governor's Bridge Road to the south and is approximately three feet wide and 6-10 inches deep at the proposed areas of impact. The two tributaries are smaller, being one foot or less in width and 2-5 inches deep. All pass through heavily wooded areas and have some aquatic vegetation. The water tends to have a brown color and an odor of vegetative decay.

Water quality was sampled south of Governor's Bridge Road (#1) and at the northern edge of Hardesty Estates (#2). The third tributary was too small from which to obtain samples. The data results shown in Table 1 indicate that conditions are relatively good for aquatic life. Dissolved oxygen levels are low due to the dry weather condition, and the high summer temperatures; standards have not been exceeded. The one tributary also has an acid condition, probably related to vegetative decay. Iron levels appear to be significant and characteristic for the area. The source of this con-

h. Water Resources - cont'd

taminent is unknown. The fact that high levels are found in all streams would tend to preclude pollution and tend toward soil leaching as the source. Turbidity was low but color was evident, also probably related to natural conditions.

Beards Creek (#4) and one of its tributaries (#3) were sampled at the Md 214 bridge and on Beards Point Road respectively. Beards Creek has an average width of 10 feet and depths of 1-2 feet. The tributary is smaller, with a one foot width and 3-6 inch depth. Stream bed and surrounding conditions are similar to Flat Creek. The water had more of a greenish color but the decay odor was still prevalent. Water quality results tended to be similar to Flat Creek with low dissolved oxygen, high iron and color results, and acid conditions. The tributary exceeded standards for pH, but had the lowest readings for iron and color. Dissolved solids also tended to be extremely low.

Glebe Creek (#5) drains the eastern end of the project area and is about three feet wide and 3-6 inches deep where it passes beneath Md 214, west of Collison Corner. The water is somewhat sluggish, brown in color and has the odor of decaying vegetation. The banks are

h. Water Resources - cont'd

heavily wooded and some aquatic vegetation is present. Water quality data is similar to the other area creeks with an acid pH, a high color reading, and low levels of dissolved solids. The dissolved iron concentrations were extremely high, approaching a toxic level to aquatic life.

Flood plains in the project area are primarily confined to Beards Creek between the wetland areas and Central Avenue and for a short distance upstream. Figure 5 presents flood prone areas based on information supplied by the U.S. Department of Housing and Urban Development, Flood Insurance Agency (FIA).

Water usage in the study area is primarily associated with onsite wells and septic systems. The Md DNR has listings for 16 ground water appropriation permits and residents are supplied by individual wells. At the present time there are no permits for surface water appropriations for any of the streams in question nor are there any discharge permits either upstream from or immediately in the project area. Some discharge permits are available in South River.

i. Social and Economic Conditions

The project area is an immediate suburb of Annapolis and well within commuting distance of Baltimore and Washington. The data presented in Table 2 indicates the population trends in the area, state and country.

Table 2

Population and Growth Rate Comparisons[1/]

Area	Population-1975	Percent Growth Rate 1950-1960	1960-1970
Maryland	4,125,296	32.3	26.5
Anne Arundel Co.	346,930	76.0	44.2
Davidsonville	4,820 (1975)	----	17.7 2/ (-4.3)

Population data and estimates for Anne Arundel County indicate 1980 and 1985 numbers at 405,144 and 470,937 persons respectively. Minority population for these years are 49,300 (13.3%) and 59,700 (14.5%). 3/

The 1975 median income was $18,000.00 for Anne Arundel County and $13,719.00 for the nation.

1/ U.S. Bureau of the Census

2/ -4.3% growth 1970-1975

3/ Baltimore Regional Planning Council

4/ Population, Housing, Income, Employment Summary Statistics. October 1976, Anne Arundel County

i. Social and Economic Conditions - cont'd.

In the project area two new sub-divisions, one well under way, the other just beginning, indicate that land uses will be changing rapidly as available land closer to Annapolis becomes scarcer or too expensive. Houses in the study area range from $30,000.00 to over $100,000.00, with the new houses predominating in the $60,000.00+ range. At the present time, there are no apartments in the study area.

Water throughout the area is supplied by individual wells and the Anne Arundel County Water System General Plan indicates that public water will be available in the eastern portion of the project area by 1993. On-site disposal is used for sanitary wastes. No public sewage collection or treatment is planned for the area in the forseeable future. In some areas this may restrict development or require larger minimum lot sizes.

Baltimore Gas & Electric Company supplies both these utilities.

While there are local industries in Davidsonville, such as Concrete Structures of Maryland, Inc. (emp. 102) the majority of the workers are employed outside the

i. Social and Economic Conditions - cont'd

project area. Income data indicate that Anne Arundel County residents have an average household income equal to the State average and about $1,600.00 (about 12%) higher than the national average. Income levels in the study area are probably somewhat higher than the County averages based on the value of the new housing being constructed along Rts. 424-214. Most are upper middle income level or higher in value with the new development at the western end of the project having residences in the $100,000.00 plus range.

Property taxes are based on an assessment rate of 50% of the actual value of real property. The tax rate for the study area is as follows:

Maryland State	$0.21/$100 of assessed value
Anne Arundel County	$2.30/$100 of assessed value

South of Rt. 214 between Rts. 2 and 468 is the site of the Central Avenue Educational Center and includes an elementary school, two junior high schools, a senior high school, a special education school and a vo-tech school. The service area is bounded on the north by the South River, on the south by Mill Swamp Road, on the east by the Chesapeake Bay and on the west by the county line. It is estimated that 5000-6000 students will be enrolled at this complex at the completion of development.[1/]

1/ Source: Anne Arundel County Board of Education

i. Social and Economic Conditions - cont'd.

Other services acquired by the study area residents are primarily available from the Annapolis area.

Police protection is provided on the County level at Edgewater though no stations are located near the project area. Anne Arundel County Sherrif's office, is located in the Police Station in Edgewater, Maryland. State Police and Annapolis City Police are located in Annapolis.

Fire protection is provided by a combination of full time employees and volunteer fire fighters. The nearest station is on the east side of the Riva Bridge with another located 2.5 miles north of U.S. 50 on Maryland 424.

There are no permanent public libraries in the project area. Service is provided by two book mobiles.

Health care is available at the Anne Arundel General Hospital in Annapolis. Ambulance service is available from the local fire stations.

A number of churches are located along the project area, in Davidsonville, near the intersection of Md 214 and Md 2, and near Collison Corner. Others are located along other major routes just outside the project area.

Commercial shopping available in the immediate study area are specialized establishments along Md 214 near Md 2 and some grocery stores in Collison Corner and Davidsonville.

i. Social and Economic Conditions - cont'd

Mass transit consists of bus service in Annapolis. It would not be feasible to service the study area due to its low population density. There are no plans in the immediate future to add mass transit facilities.

j. Aesthetics

The study area is a pleasant mixture of rural and residential development. Some highway commercial establishments detract from this setting, but not to a significant degree. The development of sub-divisions indicates a trend to a more suburban type environment; however, those presently under construction have large lots which do not totally eliminate the openness now found in the area. While the lack of vegetation gives these developments a somewhat stark appearance, this will improve as residential plantings mature.

3. Planning/Land Use

Countywide figures show that in 1975, 69% of the land was vacant or in agriculture; 14% was in residential use; 13% was in military or institutional use and 4% was in commerce, industry or parks. The total acreage of the district is 45,376 acres. Of the only 32 acres classified as industrial, none is devoted to actual manufacturing but it does include mining, public utility and other semi-industrial uses. Of the undeveloped land, approximately 27% of it is unsuitable for development because of steep slopes, flood plains, or marsh areas. (From Anne Arundel County General Development Plan, Background Summary, May, 1978).

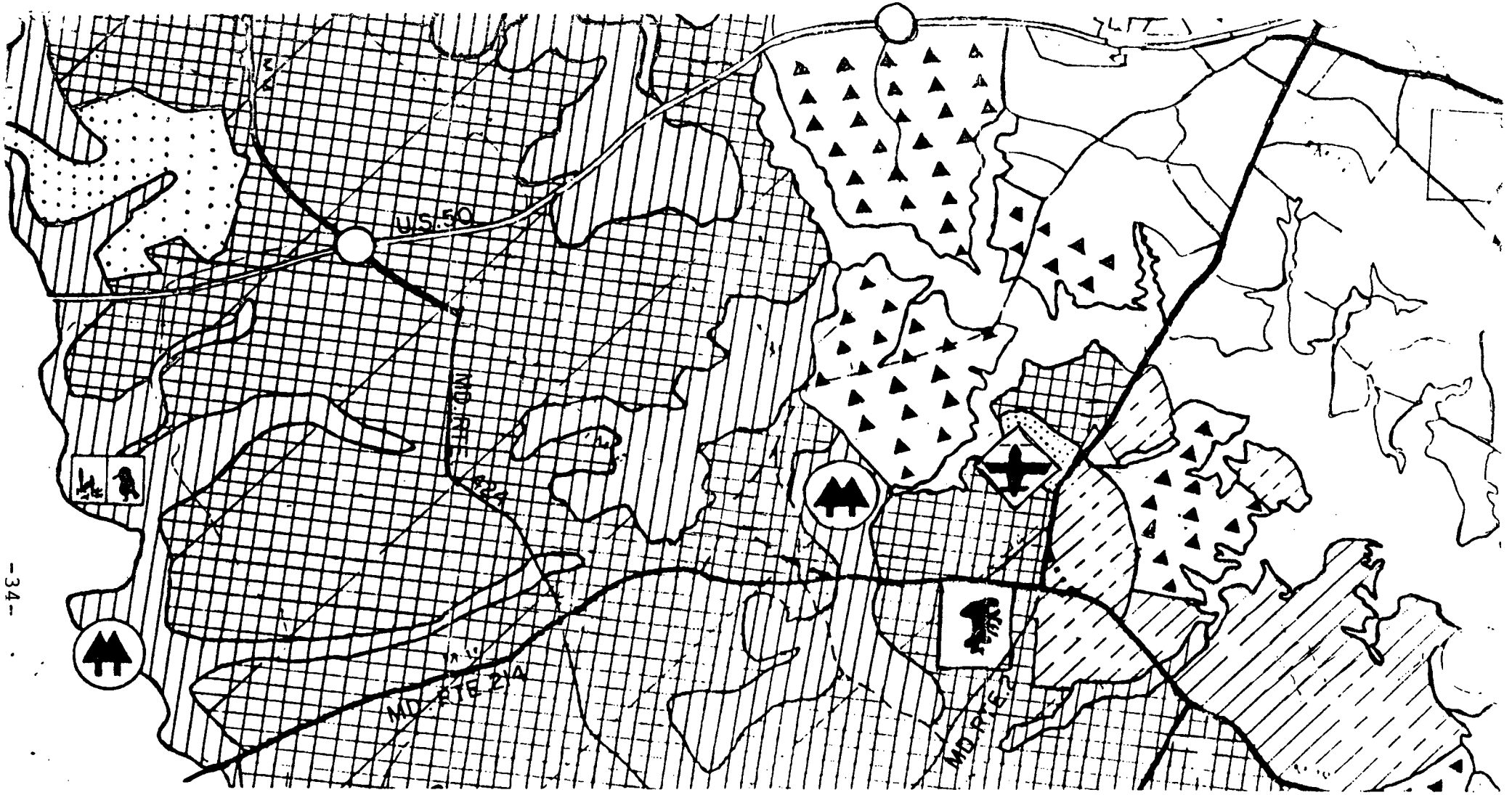
Most of the developed uses and the population of Assessment District 1 is located along the South River and the Chesapeake Bay. Development in the remainder of the area is spotty. This is true of both housing and commercial uses. The majority of the immediate project area is presently undeveloped. Exceptions are the Hardesty Estates sub-division off Route 214 and several scattered commercial areas of several stores each along Rt. 214. In addition, individual homes are scattered throughout the area along the existing roads. The Central Avenue Educational Center is located near the intersection of Rt. 214 with Md. 2. There are no industrial sites, parks, or churches in the immediate project vicinity. Ruritan Field (approximately 2 acres) located on

a. Existing Land Use - cont'd.

Route 424 is a private recreation area along Route 424 while the educational center provides recreational facilities along Route 214. Churches are located in Davidsonville and Collision Corner and along adjacent major roads.

b. Proposed Land Use

Figure 6 shows the Land Use Plan of Anne Arundel County (January, 1978). As with earlier plans, the majority of the project area is designated as agricultural study area with natural feature areas along stream banks. Improvement of the traffic situation between U.S. 301/50 and Md. 468 is consistent with the Comprehensive Development Phase; however, the County remains opposed to a limited access facility that would replace or duplicate Md. 214. The selected alternate is most compatible with the proposed land use.



LEGEND

LAND USE

NATURAL FEATURES

AGRICULTURE STUDY AREA

LOW RESIDENTIAL AREA

LOW-MEDIUM RESIDENTIAL AREA

MILITARY AND INSTITUTIONAL

SUGGESTED PARK

CRITICAL AREA

SUGGESTED SECTOR PLAN

AIRPORT

FIG. 6

LAND USE PLAN
ANNE ARUNDEL COUNTY
JANUARY 1978

9h

B. Description of the Proposed Action

The proposed project involves improvement of portions of Maryland Route 424 (Md 424) and Maryland Route 214 (Md 214) in Anne Arundel County, Maryland (Figure 1).

These two routes lie in the south central portion of the county approximately five miles southwest of Annapolis. The improvement would begin at the intersection of Md 424 and Rutland Road south of the interchange of Md 424 with U.S. Routes 50 and 301 (U.S. 50/301) and Md 468 at Collison Corner. The route is approximately 5.9 miles in length and would cross an area that is presently rural in nature.

At the present time, both Md 424 and Md 214 are functionally classified as rural minor arterials under the new Federal Aid Realignment System. However, as the area to the southeast referred to as the Mayo Peninsula has experienced residential growth, traffic volumes on these two roads have increased as commuters obtain access to the major highway network through U.S. 50 and U.S. 301 (Figure 1). The proposed project would address this problem.

C. Description of the Alternatives

1. The Selected Alternative (Alternate B)

This is a reconstruction of existing MD 424 and 214 from Rutland Road on the west to Muddy Creek Road (Md 468) on the east. No highway relocation is involved and the improvements would include retaining and widening the two lanes on the Md 424 segment and expand to four lanes on the Md 214 section, widening, straightening of curves, adding and/or improving shoulders, and the improvement of intersections. No structures would be required.

This alternative will have uncontrolled access with all existing road intersections and driveway access points being maintained.

2. Other Alternatives Considered

The recommended alternate was selected after detailed evaluation of five (5) possibilities. The four alternates not selected were as follows.

- Alternate A

This was a proposed relocation beginning approximately 3500' east of the intersection of Md 424 and U.S. 50/301. The alignment followed the right-of-way acquired by MSHA for an interchange development at Rutland Road. Following the northern edge of corridor, it crosses Governor Bridge Road, corssing Piva Road and Beards Point Road. Approximately 5000' west of Md Rt. 2 it crossed Central Avenue (Md 214) and continued easterly approximately 2000' south of that road to the project's eastern terminus at Muddy Creek Road (Md 468).

C. Description of the Alternatives - cont'd

The road had controlled access with proposed interchanges at existing Md 214 and Md 2. At grade intersections were provided at Governor Bridge Road and Beards Point Road.

- Alternate C

This plan involved the reconstruction of existing Md 424 and 214 from the intersection with Rutland Road to a point approximately 7500' west of Solomon Island Road (Md 2). From that point a new relocated road section would have been constructed south of Md 214 to the eastern terminus at Muddy Creek Road (Md 468).

- Alternate D

This involved the relocation and construction of a new highway from the western terminus, approximately 1500' west of Rutland Road, northwesterly-southeasterly to its intersection with existing Md 214, approximately 7000' west of Solomon Island Road (md 2). From that point existing Md 214 would have been used to the project's eastern terminus (Md 468).

Alternate "D," from its western terminal 1500' west of Rutland Road, easterly for approximately 3.3 miles, to existing Maryland Poute 214, Central Avenue, utilized the same alignment as Alternate "A."

C. Description of the Alternatives - cont'd

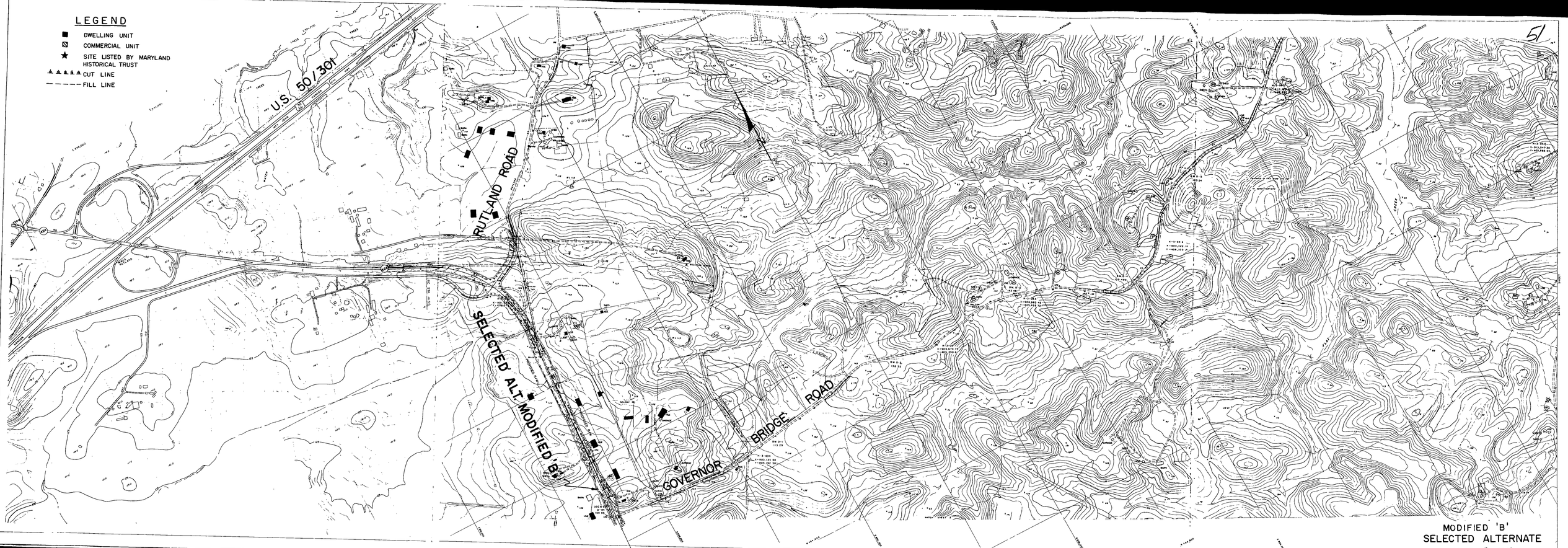
- Alternate E

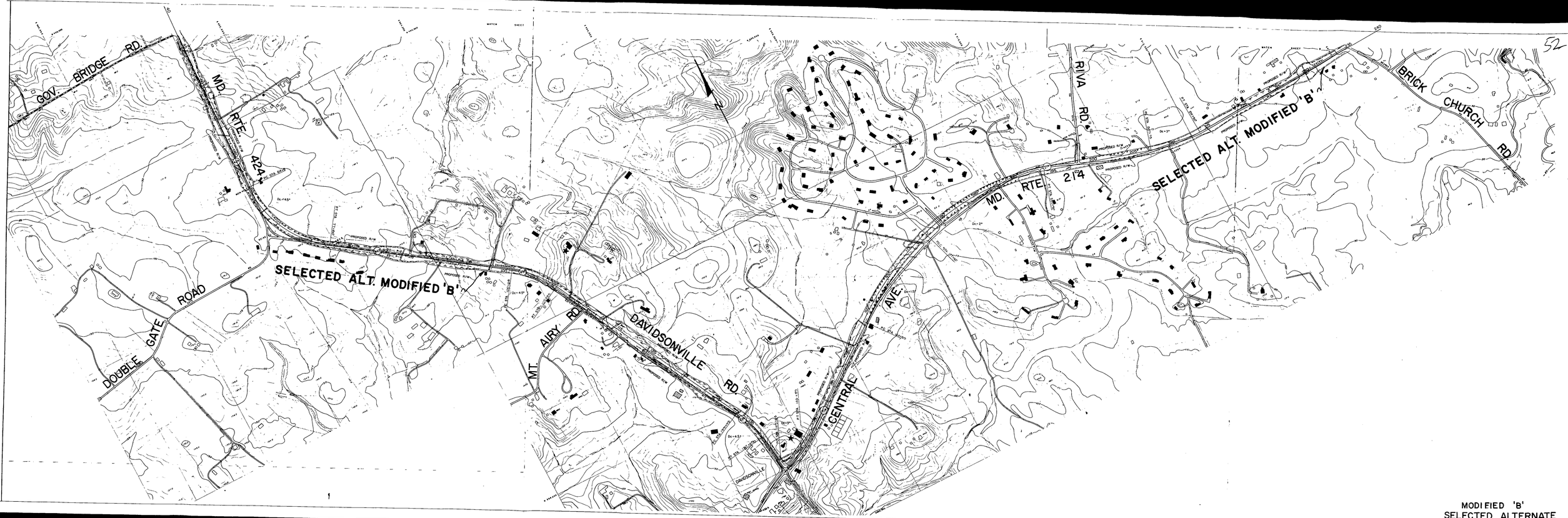
This was the "No-Build" option. No major improvements would have been made. However, normal maintenance would continue and spot safety precaution projects could have been undertaken, as required, within the existing right-of-way.

D. Engineering Factors and Costs

1. Engineering Factors

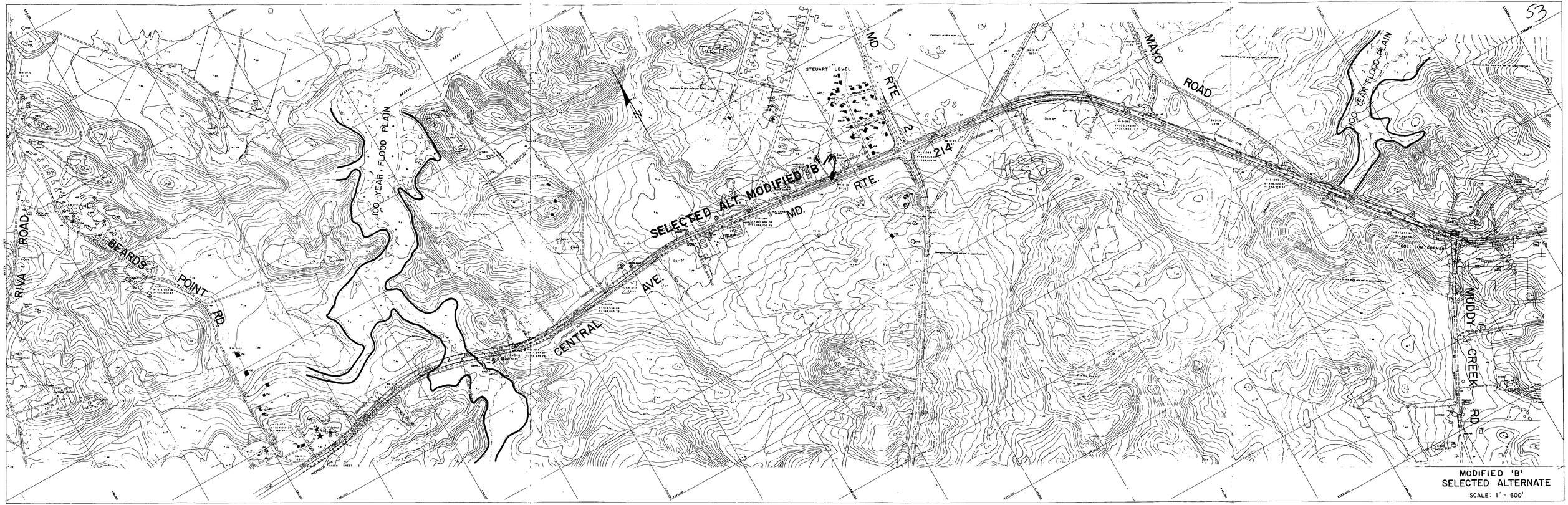
The proposed roadway will have a minimum established grade of 0.6% and a maximum grade of 6.0%. The horizontal and vertical curvatures will be in accordance with American Association of State Highway and Transportation Officials (A.A.S.H.T.O.) standards. The selected alternate design is based on a design speed of 60 mph; however, the posted speed will be considerably below the design speed. The cost analysis for the selected alternative is based on a 66 foot right of way along Md 424 and a 100 foot right of way along Md 214. A typical section is shown on Figure 7 .


LEGEND
DWELLING UNIT
COMMERCIAL UNIT
SITE LISTED BY MARYLAND HISTORICAL TRUST
CUT LINE
FILL LINE
U.S. 50/301
RUTLAND ROAD
SELECTED ALT. MODIFIED 'B'
GOVERNOR BRIDGE ROAD
MODIFIED 'B'
SELECTED ALTERNATE
SCALE: 1" = 600'
SHEET 1 OF 3

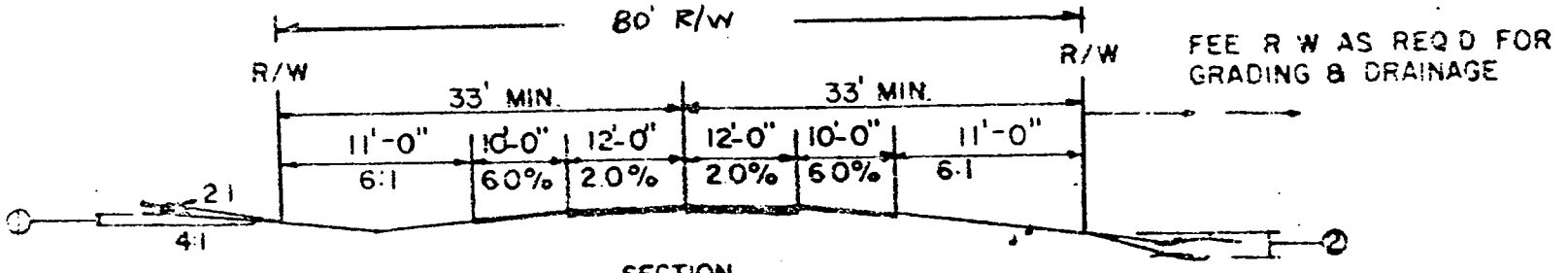


MODIFIED 'B'
SELECTED ALTERNATE

SCALE: 1" = 600'



MODIFIED 'B'
SELECTED ALTERNATE
SCALE: 1" = 600'

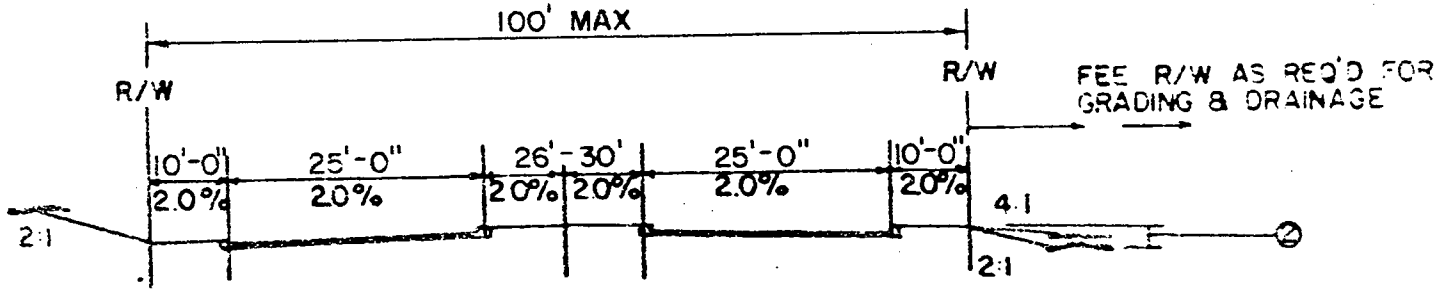


SECTION
Not To Scale

NOTE:
① 8' Maximum at 4:1 Slope.
② Over 15' Use 2:1 Slopes With Guard Rails.

From Rutland Rd. to Central Ave.
Along Existing Route 424.

ALTERNATE B



SECTION
Not To Scale

From Davidsonville to Collision Corner
Along Central Ave.

ALTERNATE B

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

TYPICAL SECTION
SELECTED ALTERNATE 'B'

FIG. 7

2. Construction Costs

The following table summarizes the anticipated construction costs for the various proposed alternates. These costs are based on 1980 prices.

Table 3

Cost Estimated (1980 Updated)

Alternate	Right-of-Way $(1,000)	Construction $(1,000)	Total $(1,000)
A	4,450 3/	14,530 1/	18,980
A 2,4/	4,890	12,470	17,360
B (selected)	2,805	5,845	8,650
C 5/	3,210	10,000	13,210
D	4,040	8,815	12,855
D 2/	4,570	7,890	12,460
No-Build	--	--	--

1/ Includes $815,000 for construction of three service roads, total length approximately two miles.

2/ Does not include service road. R/W includes cost of severed parcel.

3/ Does not include costs of severed parcels.

4/ Interchanges to be considered at Rt. 214 and Rt. 2 only.

5/ Interchange considered at Rt. 2 only.

II. Project Need

A. Deficiencies of the Existing Facility

At the present time, existing Maryland 424 between Rutland Road and Maryland 214 is narrow, twisting, two-lane road with poor vertical and horizontal alignment and poor pavement. Pavement width is often less than 20 feet and the many turns and small hills combine to restrict drivers' sight distance and produce hazardous conditions. Maryland 214 is only slightly better from Maryland 424 to Maryland 2 where the road surface is wider but curves and hills still produce problem conditions. Considering the total area, approximately 70 percent of the project length is considered sub-standard.

The existing local road network requires the growing number of residents to use rural roads to gain access to such major arteries as Maryland 2 (north to Annapolis, Baltimore, and south to Solomons Island); U.S. Route 50/301 (east-west to Annapolis and Washington); U.S. Route 301 with a connection to Maryland Route 3 (north to Baltimore and south to Virginia via the Governor Nice Memorial Bridge).

Traffic projections presented in a subsequent section of this report indicate increases in the magnitude of 100% from 1980 to 2000. The road reached its capacity in 1975.

The demand volume would be shifted to other roadways contributing to their increased congestion and accident potential. This would especially be evident during the summer season when facilities in the Chesapeake Bay attract vacationers and tourists.

Thus, it is evident that traffic originating and ending on the Mayo Peninsula and neighboring communities would obtain some relief from the improvement under consideration.

A. Deficiencies of the Existing Facility - cont'd.

A total of 248 accidents was reported on the two highways during the three-year period (1975 through 1977). The monetary loss of these accidents to the motoring and general public is approximately $1,424,000.00 for every 100 MVM. These accidents are listed below by severity indicating persons killed and injured.

A. Deficiencies of the Existing Facility (Cont'd)

Severity	MD 424			MD 214		
	1975	1976	1977	1975	1976	1977
Fatal Accidents	-	1	1	-	1	-
Persons Killed	-	1	1	-	1	-
Injury Accidents	0	5	12	26	25	31
Persons Injured	19	9	18	45	44	63
Property Damage Acc.	8	21	16	29	24	39
Total Accidents	17	27	29	55	50	70

The at-grade intersection of Md 2 and Md 214 has consistently been identified as a high accident location with new signalization recently installed. The accident experience at this location can be directly related to the high volume of left-turn movements. This accident experience is listed below by year indicating total accidents.

Year	Total Accidents
1975	16
1976	19
1977	23

Left turn accidents and sideswipe, (same direction) accidents on these two roadways occurred at a higher rate than normally expected for this type highway. All other types of collisions were found to be either below or in line, with statewide expectations for the three-year period, 1975-1977.

Alternate Evaluation

Traffic forecasts indicated more than 100% increase in vehicular volumes on this network by 1985. Under a "No-

Alternate Evaluation - cont'd

Build" Alternate, this increase will bring additional conflictions which are normally associated with congestion on highways on this design. Consequently, the accident experience and the accident rate are expected to increase, resulting in a higher accident cost to the motorists using this network. Present accident trends and peak-hour studies indicate that the accident rate on Md. 214 will approach 406 accidents/100MVM by 1985. This accident rate would be significantly higher than the statewide rate of 315 to 316 accidents/100 MVM for similar class highways.

With an increase in traffic, the frequency of left-turn accidents are expected to increase, especially at the at-grade intersections. Rear-end and sideswipe accidents should also increase, and eventually, the intersection of Md. 224 with Md. 424 could possibly meet the criterion as a high accident location.

Alternate B (Selected)

Alternate B would upgrade Md. 424 to a safer design two-lane highway which should provide for future traffic growth and hold the accident rate below the statewide average. The reconstruction of Md 214 to a four-lane divided highway, like MD. 424, would provide a safer designed highway better equipped to handle future traffic demands along this corridor. Alternate B as a highway network is expected to experience an

Alternate B (Selected) - cont'd

accident rate of approximately 269 accidents for every 100 MVM and result in an estimated accident cost to the motorists using this network of $1,247,000/100 MVM. (Year 1985).

By retaining the at-grade intersection at Maryland 2, this intersection may persisit as a high accident location in the future. At this time, it is too early to assess the effect of the safety improvement completed at this location in mid-1978.

The accident cost/100 MVM for the two alternates are listed below.

Alternate	Accident Cost/100 MVM (1985)
Selected Alternate B	$1,247,000.00
No-Build	1,882,000.00

B. Project History

The need for improvements in the study area was first recognized in 1967 and listed as a necessary critical improvement by the Anne Arundel County in the 1968-1988 "Twenty Year Highway Needs Study." Preliminary plan studies were prepared by the county during this period and submitted to the MSHA. At the present time, the 1979-1996 "Needs Study" lists for the Anne Arundel County Secondary System the relocation of Md 424, from the Rutland Road intersection to Md 2 as critical the necessity for a two lane construction (line 15) and non-critical, the construction of a four lane divided highway (line 50). The relocation of Md 214 is also listed as critical (line 14).

In the 1979-1983 construction program, for the Anne Arundel Secondary System, the improvement of Md 424 is listed as a two lane construction on line 9. The type of facility and alignment has changed since its first appearance in the 1970-1974 construction program.

The project initiation public notice for the proposed project from Rutland Road to Collison Corner was issued in the Spring of 1975. Project planning studies identified several different possible alternative alignments for the improvement which were then presented to the public and local

B. Project History - cont'd.

officials at an Interim Alternative Location Public Meeting held at the Anne Arundel County Central Elementary School on April 8, 1976. At the meeting, public comments were solicited concerning the project improvements and alignments.

Following the meeting, review of the preliminary engineering and environmental studies and the public comments, both verbal and written, by the MSHA, resulted in the elimination of six of the original eight alternatives and the modification of the proposed upgrade alignment to more closely adhere to the existing right-of-way to reduce the associated environmental impacts.

An Alternatives Public Meeting was held in the Central Junior High School on December 8, 1977 to present the revised alternates and the environmental findings. Public comment was taken and a summary was prepared on December 28, 1977.

There were expressions of both support and opposition from the public to all of the alternates presented; however, the most public support expressed verbally at the public meetings was for either the "no-build" alternate or an up-grading of the existing facility.

A project meeting was held on January 11, 1978, and work was commenced to finalize studies based on public comment. Changes included reduction of the impact to the minority community on Riva Road by the use of at-grade intersections in lieu of larger inter-changes.

Subsequently, a detailed engineering and environmental evaluation was made relative to the implementation of a single construction alternate on relocation, an upgrade design, two combinations of the new and

upgrade choices, and the "No-Build" Alternative.

Additional investigation comparing the use of at-grade intersections vs. grade separated interchanges at various locations were completed.

A Location Public Hearing was held November 19, 1979. The majority of the comments from the public at the meeting indicated support for improving the existing roadways or for the "no-build" alternate. The people that did speak in favor of an alternate on relocation, stated that the relocated alternate should be a two-lane facility. There was strong opposition shown to a four-lane roadway.

At the May 1, 1980, project meeting, it was recommended that the upgrade alternate (Alternate B) be selected with certain modifications to reduce right-of-way requirements and relocations and to further improve highway geometry. The selected alternate provides a compromise between the expressed public desire for a minimal improvement to the existing facility and the practicality of providing an improved facility for the projected traffic volumes.

III. Basis for a Negative Declaration

III. Basis for a Negative Declaration

Based on environmental studies completed for the relocation of Maryland Routes 424 and 214, the implementation of this project would not have a significant impact upon the quality of the human environment.

Results of the air quality analysis indicate that no violations of Federal or State Ambient Air Quality Standards for carbon monoxide are predicted to occur. The project is consistent with the State Implementation Plan.

Results of the Noise Analysis indicate that noise levels will increase with the selected alternate. Mitigation measures are not feasible.

The project would result in the loss of some wildlife habitat. With the exception of construction impacts, there would be no impacts upon the aquatic ecosystem. No threatened or endangered species inhabit the immediate project area.

Three (3) families and (3) businesses will be displaced. Replacement housing for the three families is available. Two of the three businesses are expected to discontinue operations, and the third should have no problem finding a replacement facility.

No property associated with historically significant sites listed by the Maryland Historical Trust will be required. No archeological sites will be impacted.

There will be no significant impact on 100 year floodplains nor impacts to wetlands. No 4(f) involvement is required for any properties so protected.

IV. Social, Economic and Environmental Impacts

A. Social and Economic

1. Regional and Community Growth

Improvement of a traffic corridor from U.S. 50 to the Mayo Peninsula will have a stimulatory effect on growth both within and south of the study area. The recent rapid growth of Bowie, Maryland, 3 miles west of the study area, and the presence of new developments within the area attest to the fact that commuters from the major employment centers of Washington and Baltimore are extending the limits of travel in search of adequate or comfortable housing.

The selected alternate will reduce travel time, and will make the area more attractive to commutors. The proximity of the area to recreational facilities of South River, Annapolis and Chesapeake Bay, as well as its relatively rural character combine to produce an area particularly attractive to the suburban dweller.

This type of growth will produce an economic basis for the establishment of commercial enterprises to serve the needs of the suburban community.

While the project will affect such growth, the choice of the No-Build Alternate would not prevent it.

1. Regional and Community Growth - cont'd

The need for adequate housing will force commuters further and further from the employment centers, eventually including the study area. Therefore, the proposed improvements will not cause regional and community growth, but are supportive of a growth pattern that is already occurring.

The project is consistent with the Anne Arundel County Planning and Zoning's "Resources for Future Growth."

The project is also consistent with Anne Arundel County's General Development Plan, adopted in 1978 and the Regional Planning Council's plans.

2. Public Facilities and Services

Implementation of the proposed project will have no negative impact on study area public facilities and services. There will be no loss of access or of any structure providing services, but travel time for emergency vehicles may increase during construction. Some small gas lines and electrical and telephone lines may require relocation but service to the respective customers will not be stopped.

Alternatively, any improvement in area traffic service will improve service access for ambulance, fire, and police vehicles. There will be some differences between alternatives in safety for those private vehicles utilizing the various facilities and services such as churches, stores, and schools along Md. 214. In particular, many of the school buses approaching or leaving the school complex at the eastern end of the project area have to cross the dangerous intersection at Md. 214 and Md. 2.

School buses and service vehicles that utilize Md. 424 would be aided in the same fashion, particularly those requiring high speeds such as fire and police vehicles.

3. Community Cohesion

The selected alternate will not affect any minority community.

3. Community Cohesion - cont'd

The improved access of the study area to the more urban areas of Washington and Baltimore will have an effect on the rural nature of the area by subjecting it to the influence of new suburban development and associated commerce which would conflict with the older rural setting. The latter may in time become out of place in comparison to the more prominent suburban setting However, this impact is not a direct impact of the highway and is likely to occur even if no action is taken.

There will be no impacts to the elderly or the handicapped.

4. Residential and Business Displacement Impacts

A detailed relocation assistance study prepared by the MSHA Bureau of Relocation Assistance demonstrates that displacement resulting from implementation of the project will vary according to the chosen alternate.

Table 4

Summary of Displacement

Alternate	Families	Minority Families	Businesses	Affected Farms
B*	3	0	3	0

* Selected

Selected Alternate - Increased right-of-way will require the displacement of three owner occupant families. Replacement is not anticipated to be difficult. No minorities are affected. Three business operations will be displaced including a welding shop, fruit stand and insurance office. The welding shop and fruit stand are anticipated to discontinue operation.

Relocation Plan - A relocation plan has been proposed by the Bureau of Relocation Assistance and is excerpted from the Relocation Assistance Study as follows:

4. Residential and Business Displacement Impacts - cont'd

"The housing market in central Anne Arundel County, since it is for the most part rural. residential and agricultural, does not have as large a turnover as the North County. However, since the selected alternate necessitates the relocation of only three families, it is expected that the housing market could easily accomodate the selected alternate.

"The following is a breakdown of the houses available in the area of central Anne Arundel County as of July, 25, 1980 obtained from the Multiple Listing Service.

Dollar Range	Houses Available
$ 0 - $30,000	0
$30,000 - $60,000	1
$60,000 - and up	6

"There are no Federal or municipal projects anticipated at the time displacement occurs; however, depending in the timing of the project, there could be a conflict with displacements from the Baltimore Annapolis Transportation Corridor Study now going on. The lead time for projects of this type is expected to be between twelve and eighteen months.

"The number of business operations disrupted by the selected Alternate is three (3).

The multiple listing service for this area of Anne Arundel County indicates that sufficient business replacement properties are available.

"There will be sufficient decent, safe and sanitary housing which is within the financial means of those displaced.

No last resort housing is anticipated.

4. Residential and Business Displacement Impacts - cont'd

"The relocation can be accomplished in accordance with the requirements of the 'Uniform Relocation Assistance and Land Acquisition Policies Act of 1970' (Public Law 90-646) and can be effectuated in a timely and humane fashion."

See Appendix for State Highway Administration Policy

5. Historic and Archeological Sites

There will be no right-of-way required from any historic sites. The State Historic Preservation Officer has determined the project will have no effect on any historic sites within the project corridor.

An archeological reconnaissance was completed and indicated that the selected alternate will not impact any known archeological sites.

No additional archeological work was recommended.

6. Park and Recreation Areas

There are no public parks or recreation areas within the project corridor. Ruritan Field is a private recreation area in Davidsonville. There will be no right-of-way acquisition required from the field.

B. Traffic Service

The purpose of this project is to solve traffic problems in the immediate study area. The solutions have a small effect on the regional situation such as reducing the travel time from the Mayo Peninsula to Washington by up to 10-15 minutes during summer peak periods. However, so many factors influence the regional conditions that the effects of this project would be minor.

Selected Alternate

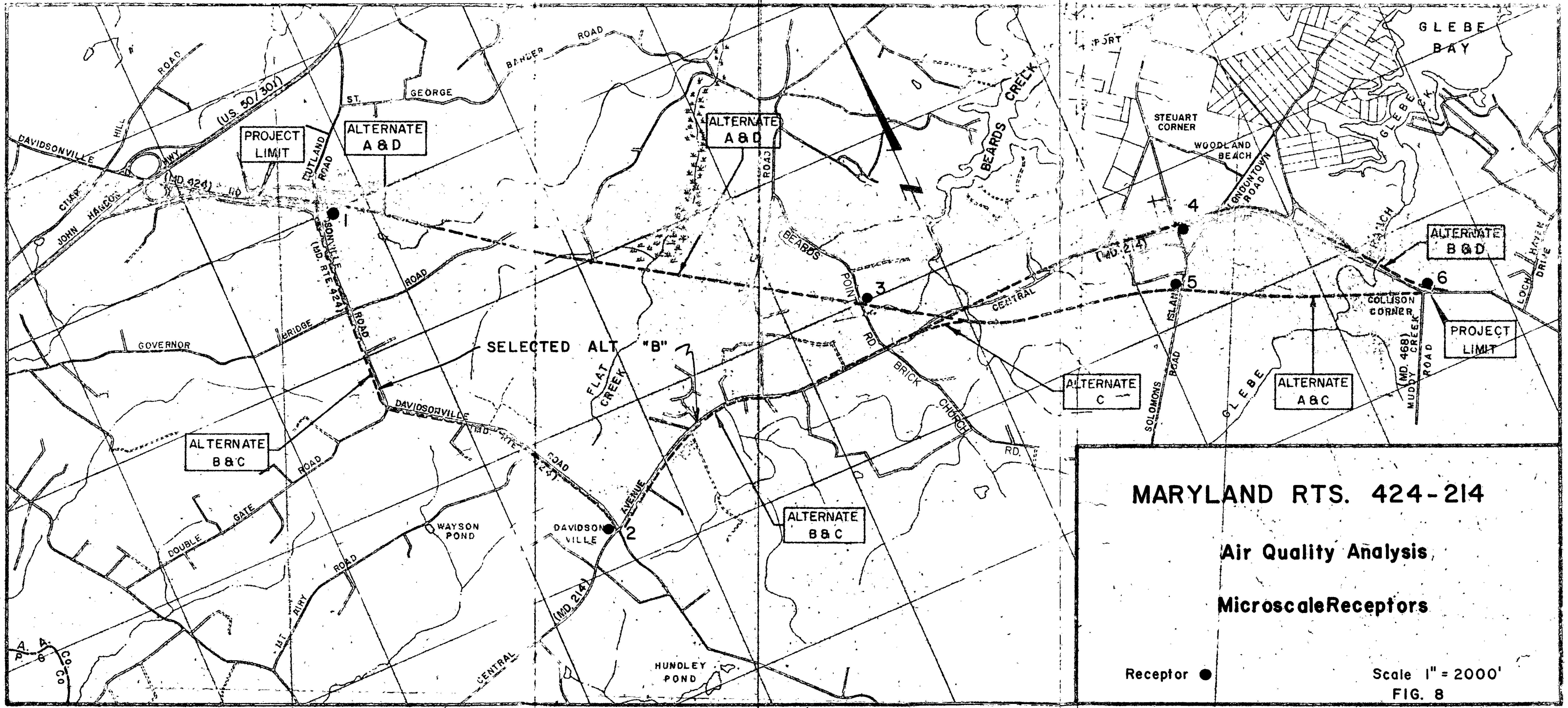
This alternative will result in no increases in traffic along Md. Rts. 424 and 214. The entire road would be improved and two additional lanes added to Route 214. The level of service will be improved over the No-Build option. A level of service "D" can be expected in the year 2005.

C. Air Quality

An air quality analysis was performed for the various alternatives and a report is available at the Maryland State Highway Administration. The one-hour and eight-hour carbon monoxide concentrations at six locations and the gross daily emissions of carbon monoxide, hydrocarbons and oxides of nitrogen were analyzed. In making these projections the following inputs and assumptions were made:

- Average operating speed: 50 mph for limited access and 35 mph for free access
- Emission factors were derived using Supplement AP-42 assuming the extension of 1978 emission standards approved in August 1977 will remain in effect
- The EPA Highway Line Source Model was used to project pollutant concentrations
- Meteorological conditions; one-hour 1 meter/second wind speed, F stability; eight-hour, combination of 1 meter/second with F stability and 2 meter/second with D stability
- Ambient Temperature: 35°F

For the one- and eight-hour periods, none of the alternatives result in concentrations that exceed the National Ambient Air Quality Standards in 1985 or 2005, as can be seen from Tables 5 and 6. The variation in emissions resulting from Alternatives A, B, C, D, or E is very small and none of the alternatives have any distinct advantages or disadvantages over the others.



MARYLAND RTS. 424-214

Air Quality Analysis

Microscale Receptors

Receptor ●

Scale 1" = 2000'

FIG. 8

Based on this analysis of microscale, regional & construction air quality and coordination with the U.S. Environmental Protection Agency and the Maryland Bureau of Air Quality, we find the project consistent with the State Implementation Plan.

The analysis performed did not assume an inspection/maintenance program for all in-use vehicles. It is reasonable to forecast that if the air analysis was redone utilizing the inspection/maintenance program the air quality levels would be less than show in the preceeding tables. Inspection/maintenance will become State law in July 1982. The inspection/maintenance program will become voluntary in July, 1981.

The air quality consistency of this project on a regional level is assumed in the following ways:

A. The National Memorandum of Understanding between U.S. Department of Transportation and Environmental Protection Agency dated June 14, 1978 formally integrates the transportation and air quality planning processes for transportation projects receiving federal aid highway funds. This Agreement recognizes that the "reduction of air pollution is an important national goal, and must be among the highest priorities of the transportation planning process in areas not meeting primary Air Quality Standards". This process provides for extensive input from the public, local and State transportation, and air quality agencies. In addition, the procedures call for the joint administration of the air quality aspects of the urban transportation planning process between U.S. Department of Transportation and Environmental Protection Agency. This includes joint review of the following documents and activities to ensure that air quality considerations are adequately addressed:

Since regional pollutants such as hydrocarbons and oxides of nitrogen, precursers of photochemical oxidants (smog) are addressed through this regional planning process only carbon monoxide emissions, a more localized pollutant, are being addressed quantatively in this analysis (environmental document).

1.) The Transportation Plan for the urban area,
2.) The Transportation Improvement Program which identifies projects for implementation,
3.) The State Implementation Plan. Transportation Control Plan for addressing attainment with Air Quality Standards,
4.) The review process which "certifies" that adequate transportation and air quality planning is being conducted in the urbanized areas.

B. Through the urban transportation planning requirement of Title 23, United States Code, Section 134, as implemented by the RPC forum, the same state and local agencies responsible for planning transportation projects in the urbanized area are also responsible--from a transportation control plan perspective--for assurring attainment of Air Quality Standards.

C. Therefore, Md. Rte. 424/214 is included in the regional transportation plan and Transportation Improvement Program for the urbanized area and is programmed for federal-aid highway funding. Thus it is subjected to this federal review and project development process. Therefore, the regional consistency of this project is addressed prior to undertaking the final project planning studies presented in this environmental document.

Table 5

One-Hour Carbon Monoxide Concentrations with Background [1/]

Receptor	Selected Alternate Case B [2/]		Case E	
	1985	2005	1985	2005
1	4.8	3.8	5.5	3.5
2	4.2	3.4	4.5	3.1
3	2.2	1.4	2.2	1.4
4	3.8	2.9	4.0	2.8
5	2.4	1.3	2.5	2.5
6	3.1	2.5	4.5	2.8

[1/] National Ambient Air Quality Standard is 35 ppm

Background - 1985 = 1.8 ppm

2005 = 1.0 ppm

[2/] Selected

Table 6
Eight-Hour Carbon Monoxide Concentrations with Background 1/

Receptor	Selected Alternate B 2/		No-Build Alternate	
	1985	2005	1985	2005
1	3.0	2.2	3.4	2.1
2	2.7	2.0	2.9	1.9
3	1.7	1.0	1.7	1.0
4	2.5	1.8	2.6	1.7
5	1.8	1.0	1.8	1.1
6	2.2	1.6	2.9	1.7

1/ National Ambient Air Quality Standard is 9 ppm

Background - 1985 = 1.5 ppm

2005 = 0.8 ppm

2/ Selected

D. Noise Projections

A noise analysis was made forcasting the impact of the proposed project on 47 noise sensitive areas. A summary and the complete noise study are available for review at the Maryland State Highway Administration offices, 300 West Preston Street, Baltimore, Maryland.

In summarizing the impacts, two criteria are used. First, does the predicted level exceed the Federal Highway Administration design levels. Second, do the predicted levels exceed ambient levels by more than 10dBA (11-15 dBA increase is significant, greater than a 15 dBA increase is severe).

Table 7 presents data for those sites which were identified as meeting either of the two criteria described above. Based on Federal Highway Administration criteria, six (6) sites or a total of ten (10) dwelling units will experience a design year noise level in excess of 70dBA. At an additional three sites, consisting of seven dwelling units, the ambient levels are predicted to be exceeded by more than 10dBA.

Several forms of noise mitigation were investigated for the nine sites presented in Table 7. The following mitigation measures are presented below: sound barriers, shifts in horizontal or vertical highway alignment, traffic control, and landscape screening. For reasons outlined below, only landscape screening was considered to be appropriate.

Sound barriers were determined to be inappropriate for this project since they would provide very little noise reduction to the affected properties. In the case of each of the impacted sites, access requirements prohibit the construction of a continuous barrier. The resulting breaks in the barrier, for driveways or streets, have the effect of negating most of the sound reducing benefits of the barrier.

The selected alternate generally follows the horizontal and vertical alignments of the existing facility. Moving the horizontal alignment to move further from a Noise Sensitive Area would simply move the potential

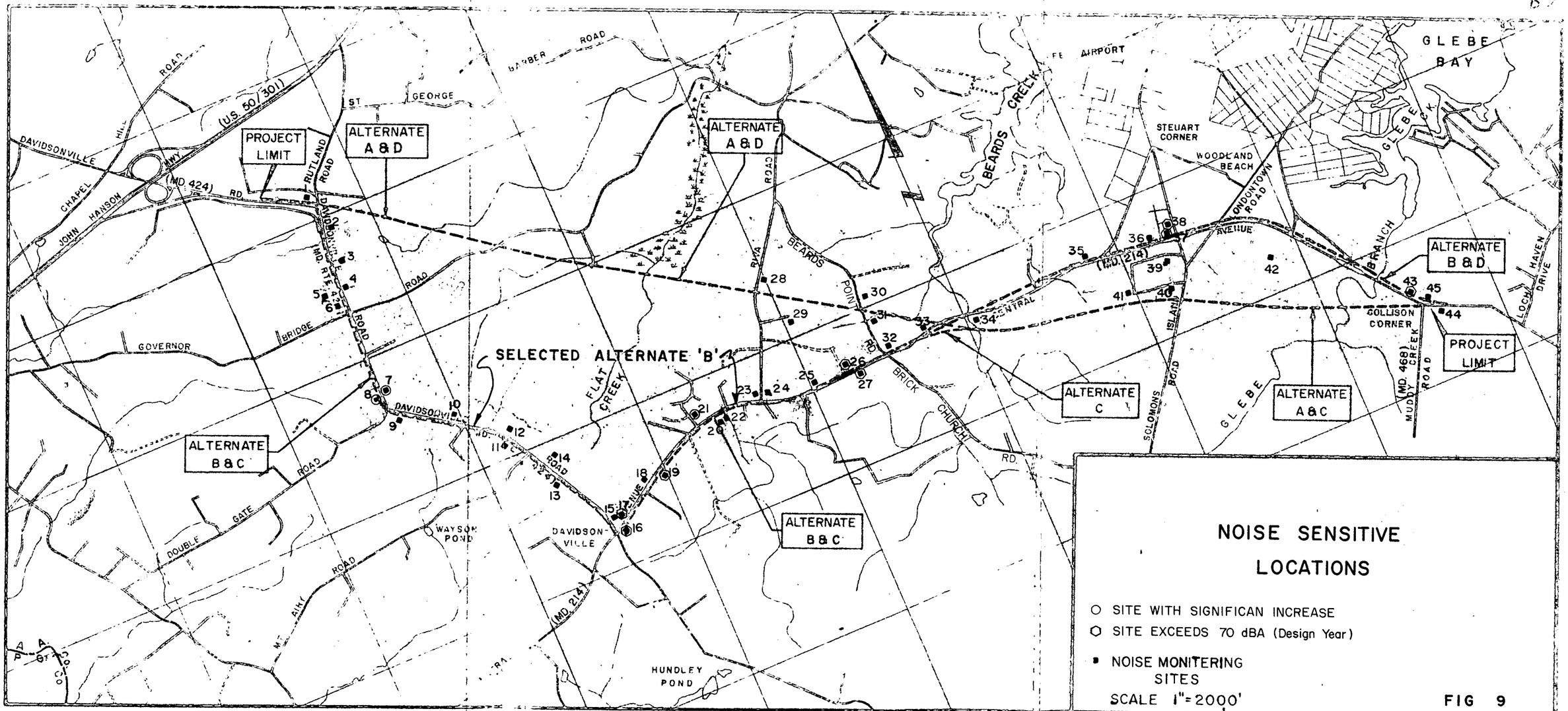

PROJECT LIMIT
ALTERNATE A&D
SELECTED ALTERNATE 'B'
ALTERNATE B&C
ALTERNATE C
ALTERNATE A&C
ALTERNATE B&D
PROJECT LIMIT
(US. 50/301)
(MD. 424)
(MD. 214)
(MD. 468)
DAVIDSONVILLE
JOHN HANSON HWY
CHAPEL HILL ROAD
ST GEORGE
RUTLAND ROAD
GOVERNOR BRIDGE ROAD
DOUBLE GATE ROAD
MT AIRY ROAD
WAYSON POND
HUNDLEY POND
FLAT CREEK
BEARDS POINT ROAD
BEARDS CREEK
BRICK CHURCH RD.
SOLOMONS ISLAND ROAD
STEUART CORNER
WOODLAND BEACH
ONDONTOWN ROAD
COLLISON CORNER
MUDDY CREEK ROAD
HAVEN DRIVE
GLEBE BAY
GLEBE CREEK
GLEBE BRANCH
NOISE SENSITIVE LOCATIONS
SITE WITH SIGNIFICAN INCREASE
SITE EXCEEDS 70 dBA (Design Year)
NOISE MONITERING SITES
SCALE 1"=2000'
FIG 9

TABLE 7

Sites with Noise Exceeding Federal Highway Administration Criteria

or

greater than 10 dBA over Ambient

SITE	DESCRIPTION *	AMBIENT	NO-BUILD	SELECTED ALTERNATE
7	SFR (1)	53	65	65
8	SFR (1)	52	64	64
16	SFR (2)	68	70	75**
17	SFR (2)	68	70	73**
19	SFR (1)	68	75**	72**
21	SFR (5)	58	61	69
27	SFR (1)	63	69	72**
37	SFR (3)	63	69	71**
43	SFR (1)	75	70	73**

* SFR = SINGLE FAMILY RESIDENCE (Number in parenthesis is the number of dwelling units at the site)

** FHWA design level of 70dBA exceeded at this site.

noise problem to another noise sensitive area. There are areas where a slight shift in the horizontal alignment may be possible. However, this would result in additional cost through the acquisition of additional right of way and the placing of undesirable curves in the roadway. It would not be feasible to consider changes in the vertical alignment. The alignment would have to be drastically changed either by lowering or raising the grades on the existing alignment. This would not be cost effective, good engineering practice or aesthetically compatable with the surrounding topography and land use.

Traffic control measures such has limiting truck traffic on the facility would not be effective in reducing noise levels. Truck traffic amounts to only approximately 5 percent of the Average Daily Traffic. Limiting or banning truck traffic would result in a minor decrease in noise levels. However, because of the direct access the facility provides from U.S. 50/301 to the high density areas of the Mayo Penninsula, the limiting or banning of truck traffic would not be consistent with the purpose of the facility and it would also limit its usefulness to the area of the County for which it was planned and designed to serve.

Partial mitigation in the form of landscape screening will be considered that may not significantly reduce noise levels, but will provide a screen or visual barrier between the noise sensitive area and the proposed facility. Any vegetation used during the landscaping of the various sites will be of type indigenous to the area. All work will be completed after coordination and consultation with the property owners.

E. Water Resources

1. Water Quality

The primary potential impact of highway construction on water quality is usually related to erosion and sedimentation problems. This would appear to be the case for the proposed project due to the moderate to severe erosion potential of the study area soils.

Erosion control measures will be required on the project in accordance with the Erosion and Sediment Control Program adopted by the Maryland State Highway Administration and approved by the Maryland Department of Natural Resources, September 3, 1970, in accordance with Chapter 245 of the Acts of the 1970 Maryland General Assembly. Therefore, adverse effects on water quality will be kept to a minimum. Erosion control technology is developing quite rapidly and numerous techniques are now used to reduce erosion and sediment damage.

2. Stream Modification or Impoundment Impacts

Implementation of the project will require the crossing of three streams or creeks of varying size. These creeks are not large enough to warrant consideration of a bridge, particularly when available technology for culverts maintains impacts to a minimal level.

The extension of existing culverts or pipes for roadway crossings will effect the stream by eliminating the dynamic nature of the water bed and the important aquatic-terrestrial interface. These losses result in changes to the stream flow patterns and rates, and to the biotic community in the immediate project area. Construction design will account for these disturbances by adjusting slope, width, and bank configuration to reduce anticipated impacts.

The degree of significance is directly associated with the individual existing conditions. Also, in most cases, the natural processes permit an adjustment of conditions to maintain impacts at a nominal level.

The period of serious potential impact occurs during the construction phase when activity requires

2. Stream Modification or Impoundment Impacts - cont'd.

work within the stream or immediately adjacent to the water edge. Dredging activities required to straighten the flow pattern, and the necessity to place fill above and along the water's edge can result in excessive turbidity and chemical concentrations that would reduce the water quality for a considerable distance downstream, affecting the biotic community and inhibiting the water usage for other purposes.

Sedimentation controls are available to reduce the impacts and the technology is reasonably standardized. (Previous Section). Specifications for the establishment of sedimentation checks, sedimentation ponds, rock dams, and other dewatering techniques are readily available to the contractor and are required to be outlined prior to the issuance of Section 404 permits from the U.S. Army Corps of Engineers. This type of permit will be required before construction can begin on each of the permanent streams to be crossed by the selected alternate.

3. Floodplains

Figure 5 indicates the amount of intrusion into the designated 100 year floodplain by the various alternates. The selected alternate will not have a significant encroachment on the floodplain resulting in any risks or impacts to the beneficial floodplain values or provide direct or indirect support to further development within the floodplain.

The selected alternate will have little impact on the designated floodplain. Changes or increases in flooding both upstream and downstream will be nominal with no significant impact. New culverts will be designed to function the same as existing culverts . Thus there will be no increases or decreases in upstream or downstream water surface elevations. At each of the stream crossings the existing roadway has a culvert for drainage.

F. Natural and Scenic Resources

1. Geology, Topography, and Soils

The proposed project would have no impact on the study area geology. No deep cuts are required. No unique geologic features or fault lines are known to be in the study area.

The initial subsurface water table may be encountered in some areas, which will be discussed in the section on soils. However, this would represent seasonal high water tables and not the important subterranian aquifers. Proposed excavation is not extensive enough to disturb significant groundwater reserves.

Topography would be altered with construction due to cut and fill operations in order to maintain safe and consistent road surface grades. These changes are site specific and will have no effect on area topography. The changes do not exceed 20 feet in elevation and will, therefore, not affect other environmental resources dependent on topography or slope. Care has also been taken to provide adequate piping so that drainage patterns would not be disrupted.

1. Geology, Topography, and Soils - cont'd

Highway implementation will require the irretrievable loss of topsoil within the construction limits.

The selected alternate will not require the loss of prime agricultural soils as designated by the Soil Conservation Service (Table 8).

Erosion potential presents a hazard to area surface waters and some terrestrial communities from construction activities. As described in Section I, soils in this area have a moderate to severe erosion potential which, without controls following disturbances, would quickly wash downhill during periods of precipitation, covering small terrestrial vegetation and entering the perrenial surface waters. Disturbances include any removal of surface vegetation which involves areas not only of excavation but also areas of fill due to the requirements of establishing a firm road bed. This type of disturbance is anticipated during the construction phase for both the new facility and to a lesser degree the upgrade alternate. Mitigation measures will be employed to minimize the impacts to erosion and the technology has progressed to a point of standardization. A discussion of erosion control is presented in the section concerning water quality.

Table 8

Losses in Prime Agricultural Soils
and Vegetation by Alternate

	Soils	Woodlands
B*	0	0 acres
E	0	0 acres

* Selected

2. Vegetation

The selected alternate will not require any woodland areas and will have little impact on the vegetation of the area.

3. Wildlife

Terrestrial

Information available from the Maryland Department of Natural Resources, indicates that a nesting site for a bald eagle, an endangered species , is known to exist along South River, approximately one mile south of the U.S. 50 bridge. The action is far enough away to prevent disruption of the nesting and feeding habits of species utilizing this nest and this will not have effects to the habitat.

Aquatic - The selected alternate will affect aquatic life only to the extent that existing stream crossings will be reconstructed and slightly lengthened to accommodate the wider right of way. No significant habitat reduction will occur. In no cases will the stream crossings require a rigid bottom culvert that exceeds the 150 foot limit imposed by the Department of Natural Resources regulations.

4. Wetlands

The proposed project will not impact the wetlands designated by Maryland Department of Natural Resources associated with the tidal portion of Beards Creek. At the present time, the Md 214 crossing of Beards Creek is approximately 2000 feet upstream from or south of the edge of the wetlands. None of the proposed alternatives will affect the area between the southern limit of the wetlands and the existing culvert.

During the construction phase, there is the potential of sedimentation damage downstream from the project site smothering the benthic community in the intervening creek bed and portions of the wetland. This represents the most likely worst case because most sediment that would occur will settle out due to the moderate flow rate of the creek and the less than 10 percent slope of the area. However, rigid controls for erosion and sedimentation required by MSHA should prevent any impact to the streams and wetlands.

G. Aesthetics

As stated in the existing conditions description the nature of the study area is changing from rural to low density residential. As a result the aesthetic character is also changing. This project, particularly the new alignment alternatives, may accelerate these changes but would not change established trends or patterns.

The proposed project should have little impact on aesthetics.

V. Concurring Statements

100

State of Maryland

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
ENVIRONMENTAL HEALTH ADMINISTRATION
P.O. BOX 13387
201 WEST PRESTON STREET
BALTIMORE, MARYLAND 21203
PHONE • 301-383- 3245

NEIL SOLOMON, M.D., PH.D.
SECRETARY

DONALD H. NOREN
DIRECTOR

October 11, 1977

Mr. Andy Brooks
Bureau of Landscape Architecture
Joppa and Falls Roads
Brooklandville, Maryland 21022

Dear Andy,

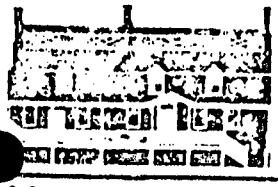
We reviewed the Draft Air Quality Impact Analysis for the Modification of Rts. 424-214 and have found all proposed alternates consistent with air quality standards.

Both drafts contained one minor deficiency--omission of the average temperature during ambient air monitoring. The average temperature of 35°F we obtained from you via phone conversation is acceptable. We will expect that future analyses contain this information.

Sincerely yours,

William K. Bonta, Chief
Division of Program Planning & Analysis
Bureau of Air Quality and Noise Control

WKB:JH:bac



Maryland Historical Trust

December 15, 1977

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

RE: Md. Rt. 424

Dear Mr. Camponeschi:

We agree with the recommendation on the Cox site. The surface survey and test-pit program seem adequate to establish the physical evidence for a site at that location. Since no evidence was found, we agree that the best course is to alert the construction personnel of the possibilites.

Sincerely yours,

John N. Pearce

John N. Pearce
State Historic
Preservation Officer

JNP:LG:mms

cc: Mr. Brice M. Clagett
Mr. Richard McClelland
Mrs. Mary McHenry
Mrs. Margaret Ballard
Mr. Tyler Bastian

DIRECTOR

102

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401

December 23, 1975

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

Re: AA 669-000-571
Md. Rtes. 424 and
214 Relocations
From S.E. of U.S. 50/301
to Md. Rte 214 at
Md. Rte 468

Dear Mr. Camponeschi:

The (Draft) Interim Location Report dated November, 1975 has received the necessary review. Our comments are as follows:

1. We concur that the southern alternatives would result in reduced erosion, fisheries and habitat problems than development of a northern alternative.

2. The ensuing study phases should provide detailed information on land uses, vegetation, anadromous fish usage, wildlife utilization, etc.

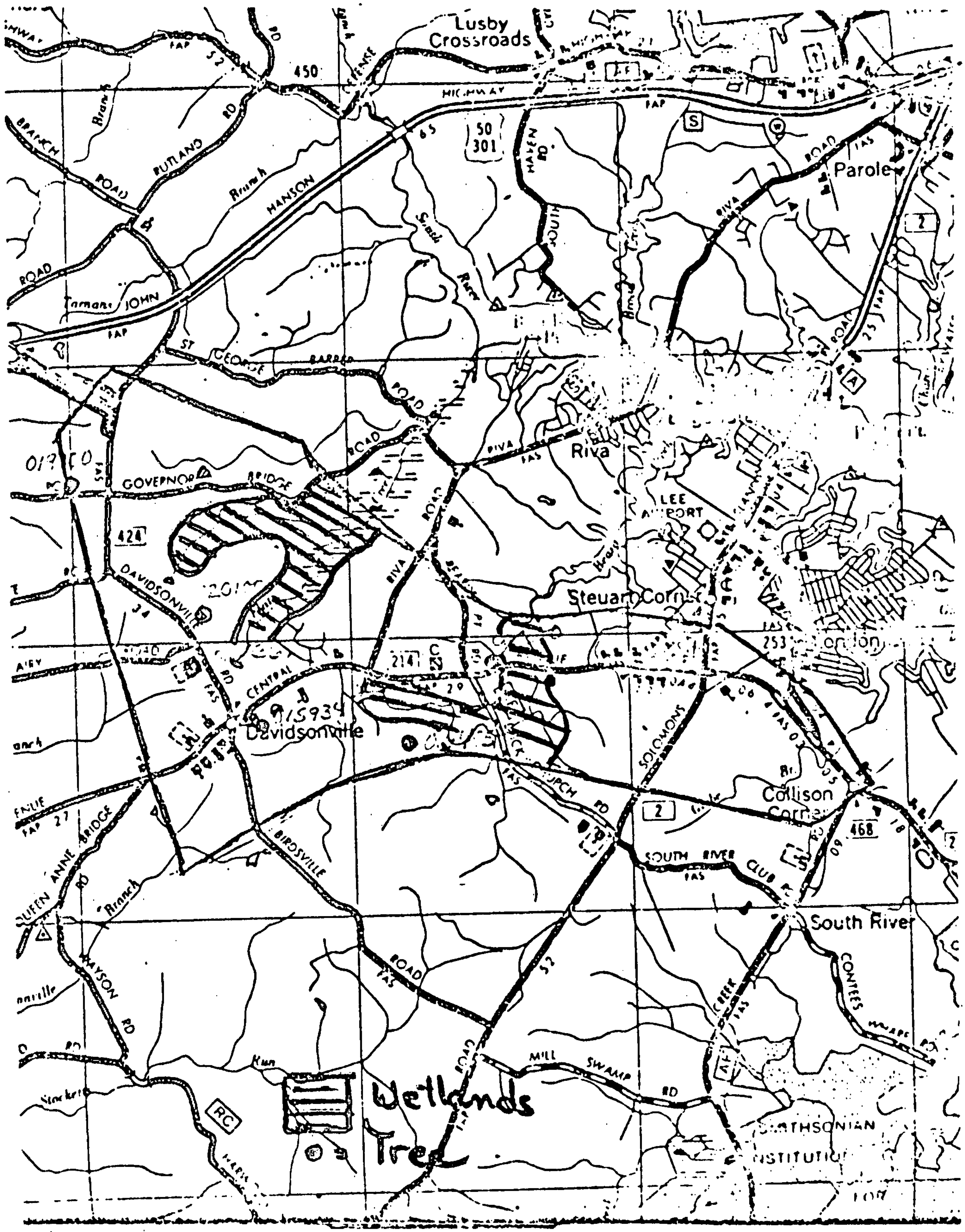
3. According to the Wetlands Section, a bald eagle is freguently sighted in the Beards Creek area of the South River. (See page 92)

We will be unable to attend the January 13 meeting. If there are any questions, please have S.J. Rosen Associates contact the Wetland Permit Section directly (Mr. H. Cassell, 267-5873).

Very truly yours,

Michael A. Ports, Chief
Surface Water Permits

MAP/JOS:jb


Lusby
Crossroads
HIGHWAY
50
301
Parole
Riva
GOVERNOR BRIDGE
424
DAVIDSONVILLE
LEE AIRPORT
Steuart Corner
214
Davidsonville
Collison Corner
South River
SOUTH RIVER CLUB
MILL SWAMP RD
SMITHSONIAN
INSTITUTION
BIRDSVILLE
SOLOMONS
HANSON
RUTLAND RD
ST GEORGE BARBER ROAD
CENTRAL
QUEEN ANNE BRIDGE
WAYSON RD
468
253
Wetlands
Tree

The Maryland Historical Trust
Shaw House, 21 State Circle, Annapolis, Maryland 21401
301: 267-1212 or 301: 267-1438

10f

June 30, 1975

Mr. Eugene T. Camponeschi
Chief, Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21203

RE: Contr. No. AA-669-471
Md. Rt. 424 Relocated and
Md. Rt. 214 Relocated from
S. of U.S. Rt. 50/301 to
Md. Rt. 214 at Md. Rt. 468

Dear Mr. Camponeschi:

I have received comments concerning the project listed above from Mrs. Ann Agee, Chairman of the Anne Arundel County Committee of the Maryland Historical Trust. She feels, as does the Trust, that if the proposed relocation is sited in the northern part of the study area, it will not affect any of the historic buildings listed in the Trust's survey records.

On the enclosed map of the study area, I have shown the proposed location of Md. Rt. 424 as it is shown on maps in our records as well as the locations of historic buildings in the area. These buildings are:

159 Inglehart House or the Davidson House - two story, frame, c. 1835.

160 Mt. Airy - listed on the National Register of Historic Places.

162 Countess - c. 1850, two story house with side hall and double parlor.

197 Willow Glen - frame gambrel roof house.

201 The Vitzthum Residence - c. 1870, Greek Revival house.

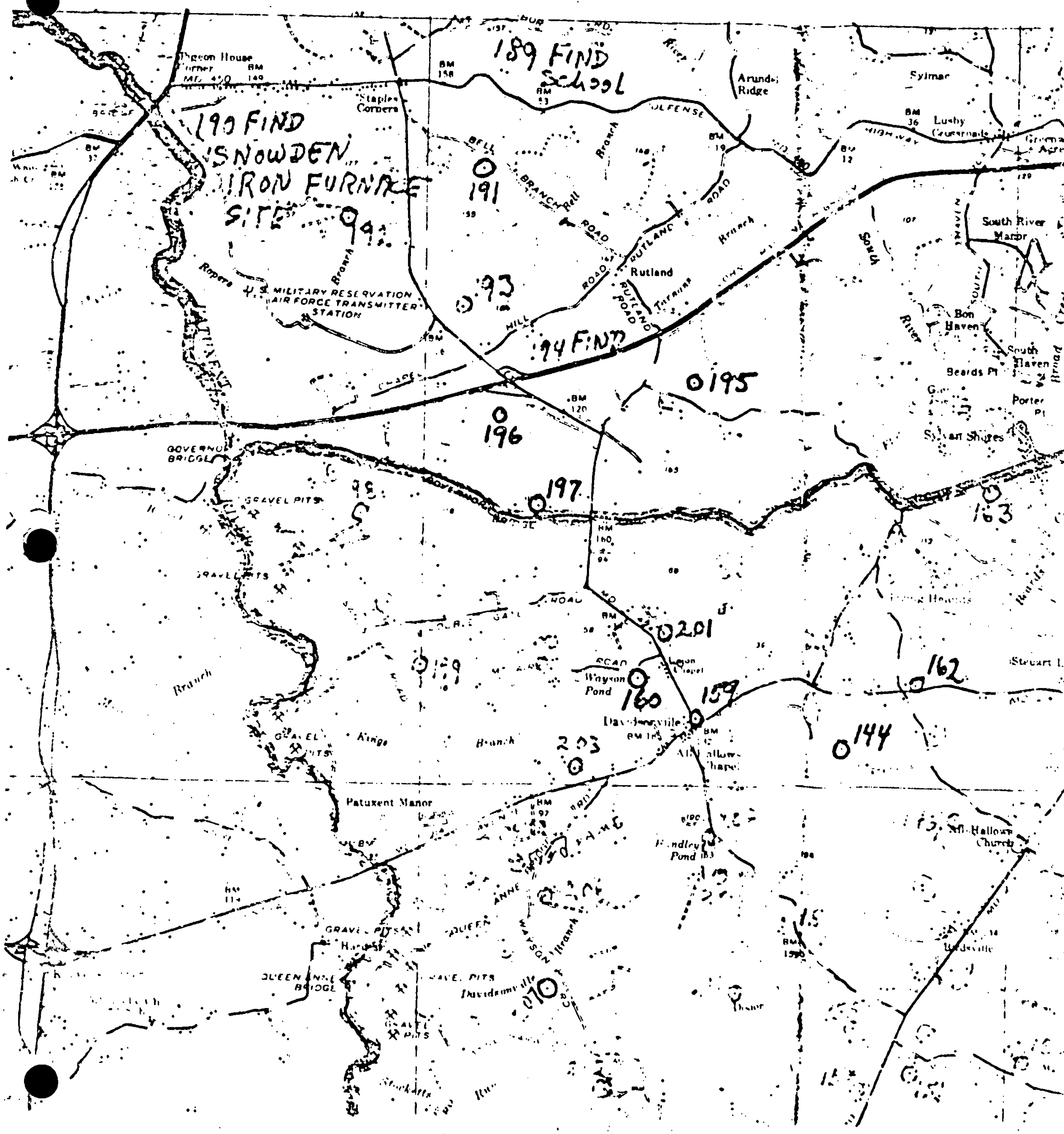
Thank you for your consideration of these buildings.

Sincerely,

George J. Andreve

George J. Andreve
Assistant Architectural
Historian

GJA:sh
Enclosure
cc: Mrs. Ann Agee


189 FIND
School
190 FIND
SNOWDEN
IRON FURNACE
SITE
191
193
194 FIND
0195
196
197
163
0201
160
159
162
0144
203
Pigeon House
Staples Corners
Arundel Ridge
Sylmar
Lusby Crossroads
South River Manor
Rutland
Bon Haven
South Haven
Beards Pt
Porter Pt
Sylvan Shores
U.S. MILITARY RESERVATION
AIR FORCE TRANSMITTER
STATION
GOVERNOR BRIDGE
GRAVEL PITS
Wayson Pond
Davidsonville
All Hallows Chapel
Patuxent Manor
Kings
Branch
Handley Pond
All Hallows Church
QUEEN ANNE BRIDGE
Davidsonville
Rutland
ROAD
HILL
CHAPEL
DEFENSE
HIGHWAY
Stewart

Anne Arundel County
Office of Planning & Zoning
Annapolis, Maryland 21404

February 14, 1975

Mr. William Hopkins, Project Engineer
Route 424
Bureau of Project Planning
State Highway Administration
P.O. Box 717
301 West Preston Street
Baltimore, Maryland 21203

Dear Bill:

Pursuant to your request, I have attached a map showing the locations of historic sites in the project vicinity. The site names are as follows:

144 - "Summerhill" (National Register), Mrs. Stanley Day
159 - "Old Davidson House", Dr. Leymont M. Lott
160 - "Mt. Airy", Paul F. Summers Jr. (National Register)
162 - "Countess", Iva Coff
195 - "Howards Grove", Mrs. St. George Barber
196 - "Locust Farm", Benjamin Watkins III
197 - "Willow Glen", Earl Gordon Townsend
201 - "Vitzthum House", Richard C. Vitzthum.

If you need more details please let me know. Descriptions will be available soon.

Sincerely,

Roland Davis

Roland Davis
Senior Transportation Planner

RD/jls

cc: Mel Beall, John Harms and Assoc.

Maryland Historical Trust

April 5, 1979

Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

Re: Maryland Routes 424 and 214
relocated
Contract No. AA 669-000-571

Dear Mr. Camponeschi:

The following historically significant boundaries have been established for the sites identified in the vicinity of Maryland Routes 424 and 214.

The boundaries for Mt. Airy (AA-160), listed on the National Register, are equivalent to the present tax parcel. Those for the potential National Register eligible sites, Locust Farm (AA-196) and the Vitzthum Residence (AA-201), are shown on Maps A and B, respectively. One additional site appears to be eligible for the Register: Willow Glen (AA-197). Its boundaries may be considered equivalent to the present tax parcel. Preliminary determination shows no effect upon these sites by proposed construction.

Regarding sites of local significance: boundaries for the Tucker Farm and the Old Townshend Farm on Davidsonville Road are indicated on Maps C and D; boundaries for the Old Davidson House (AA-159), Countess (AA-162), and site C may be considered coterminous with the structures themselves.

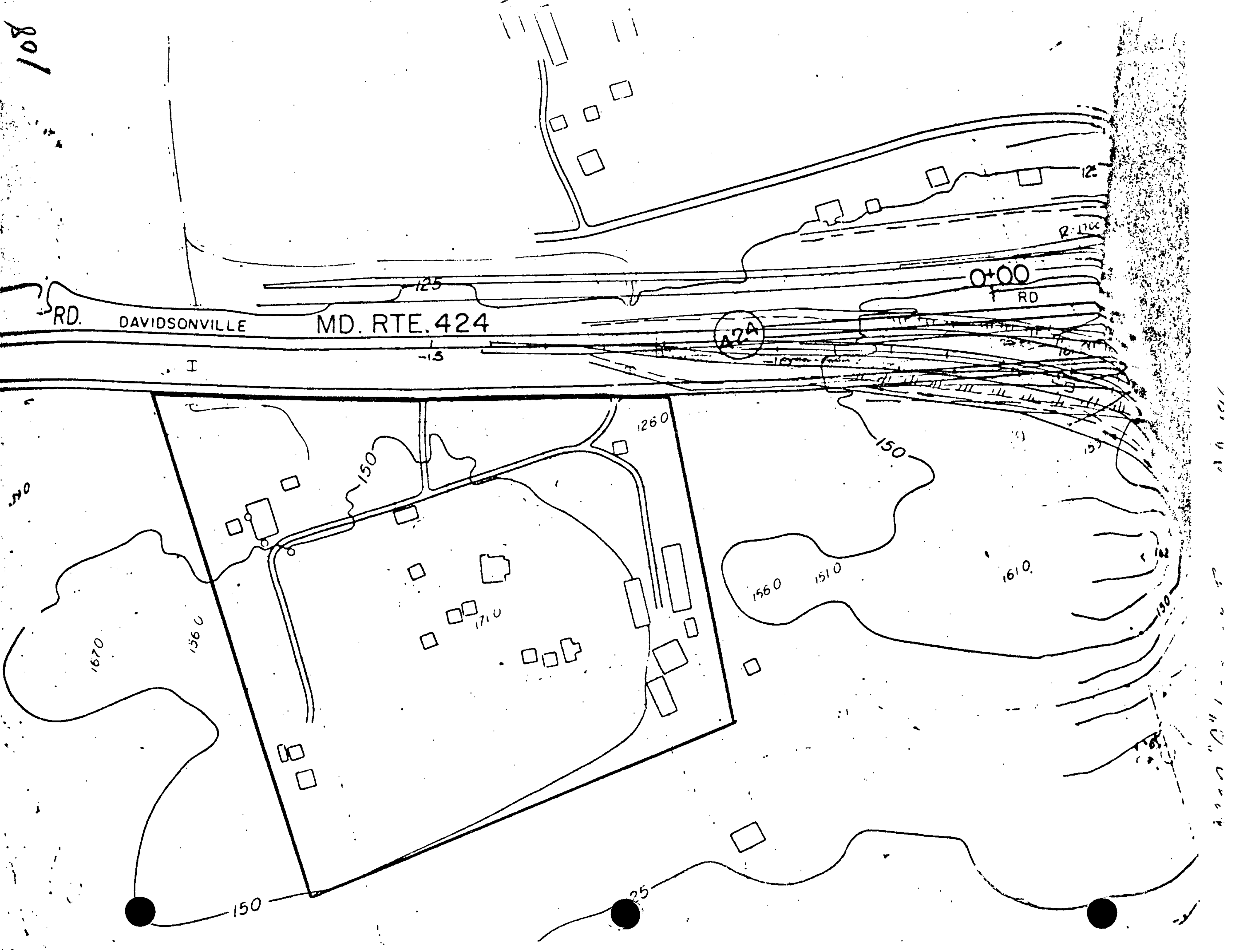
Sincerely,

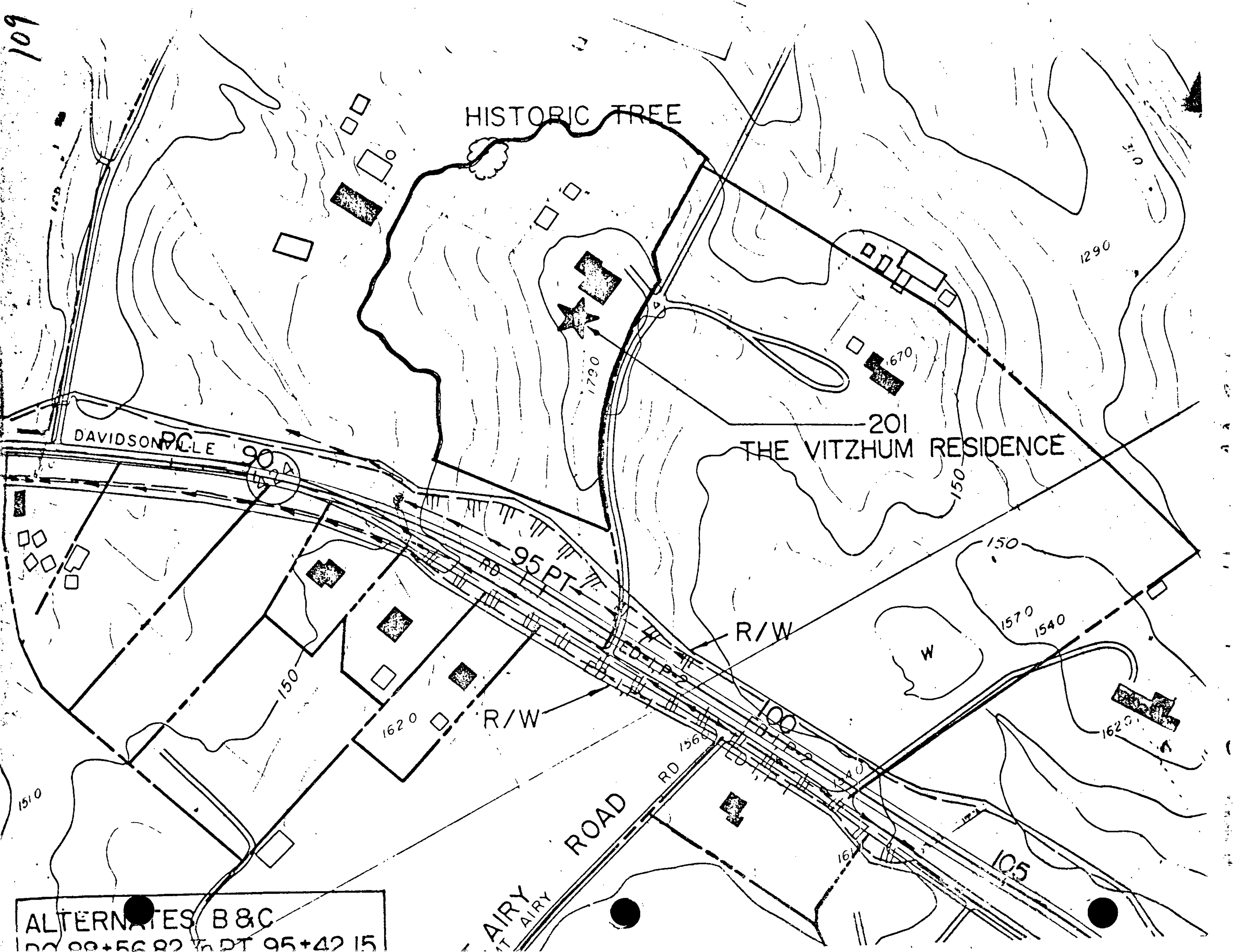
J. Rodney Little
State Historic
Preservation Officer

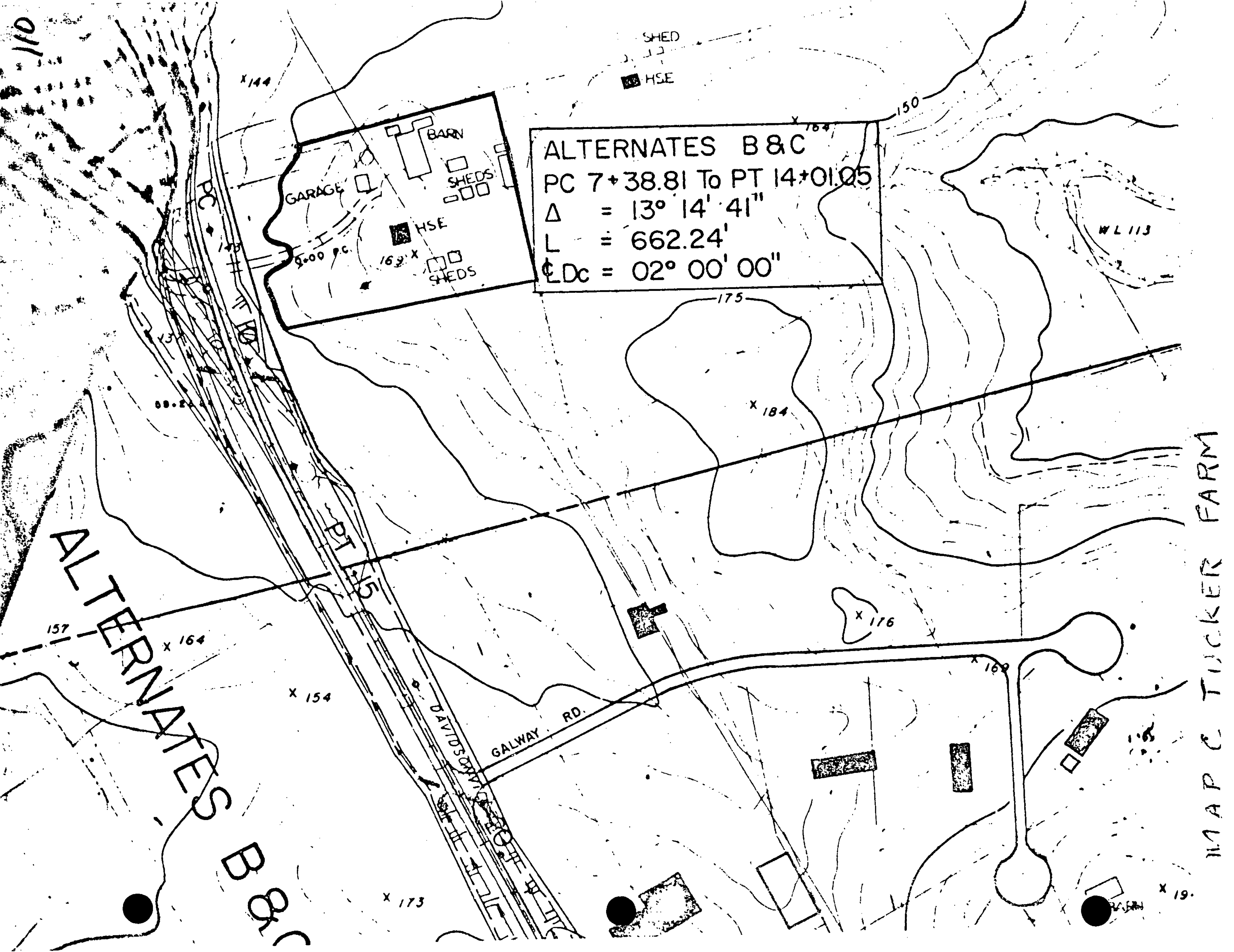
JRL/Kan
Enclosures

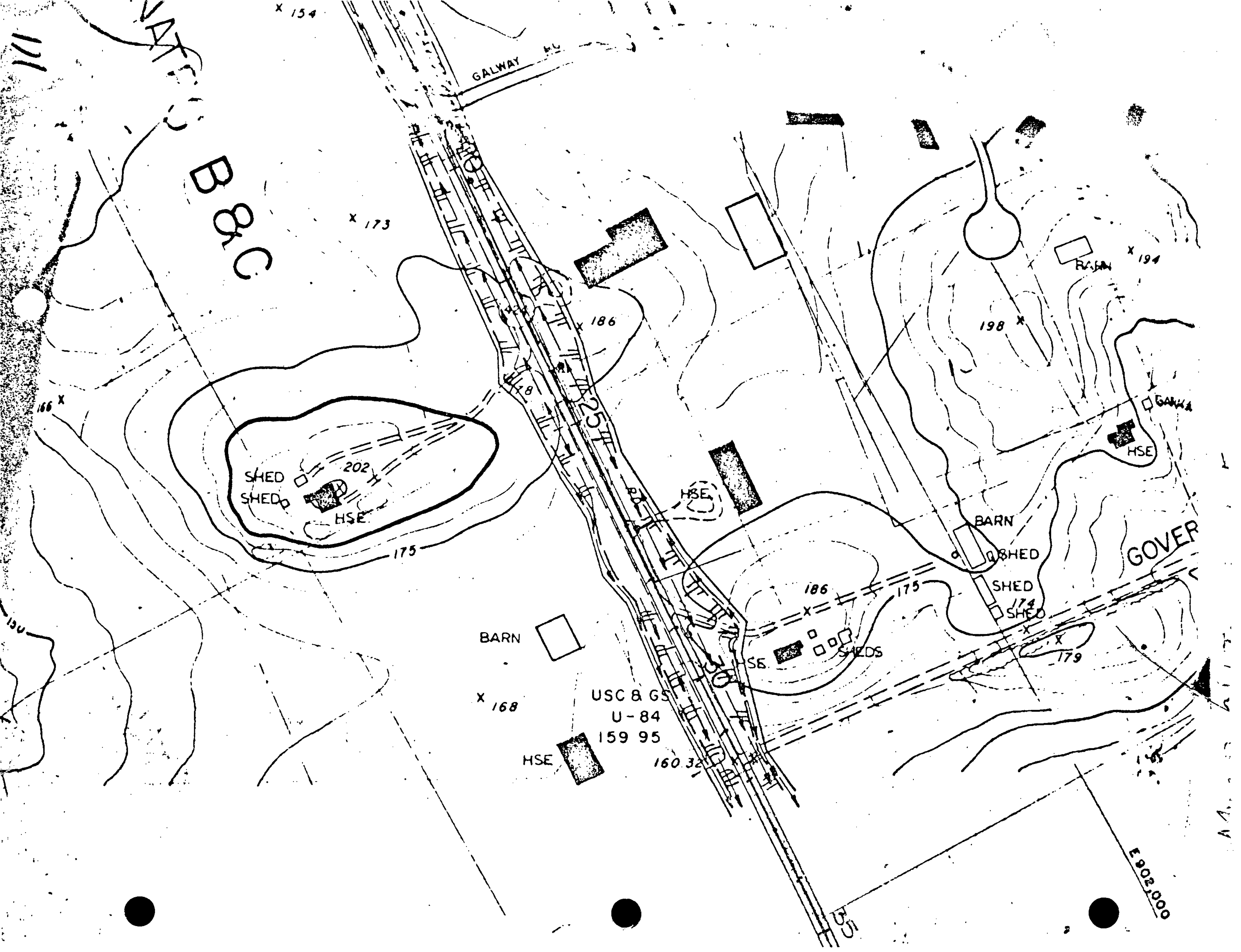
cc: M.Ballard
P.Kurtze

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


RD.
DAVIDSONVILLE
MD. RTE. 424
424
0+00
RD
125
150
150
150
1260
1560
1510
1610
1710
1670
1560
125


HISTORIC TREE
201
THE VITZHUM RESIDENCE
DAVIDSONVILLE
RD
PC
90
95 PT
100
105
R/W
R/W
ROAD
RD
AIRY
1290
1670
1790
150
1570
1540
W
1620
1510
ALTERNATES B&C
PC 88+56.82 To PT 95+42.15


110
ALTERNATES B&C
PC 7+38.81 To PT 14+01.05
Δ = 13° 14' 41"
L = 662.24'
℄Dc = 02° 00' 00"
SHED
HSE
BARN
SHEDS
GARAGE
HSE
SHEDS
150
175
x 144
x 164
x 184
x 176
x 169
x 154
x 164
x 173
157
WL 113
PC
PT 15
GALWAY RD.
DAVIDSON
ALTERNATES B&C
MAP C TUCKER FARM



B&C
GALWAY
173
154
186
166
202
SHED
SHED
HSE
175
178
25
HSE
BARN
USC & GS
U-84
159 95
160 32
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E 902,000

MARYLAND
DEPARTMENT OF STATE PLANNING
301 WEST PRESTON STREET
BALTIMORE, MARYLAND 21201
TELEPHONE: 301-383-2451

MARVIN MANDEL
GOVERNOR

VLADIMIR A. WAHBE
SECRETARY OF STATE PLANNING
MADELINE L. SCHUSTER
DEPUTY SECRETARY

112

RE: Information Requests

TO: Mr, Eugene Camponeschi, Chief, Bureau of Project Planning, SHA.

FROM: Ted Bishop, Transportation Planner, Dept.of State Planning

The Department of State Planning Received on March 6,1975 your notification concerning the following project:

Maryland 424 Relocated and Maryland 214 Relocated-Project Planning Activities.

You have requested that this Department:

Review Public Notice.

This Department considers the following action(s) to be appropriate:

_____ The information you have requested is not available from this Department. We suggest you contact;_____

_____ The information you have requested can be provided by:_____ of our regional office. They may be reached by Phoning:_____.

X We have included the following for your use:

Please see attached map that indicates wetland areas in vicinity of proposed project. Especially note location of Flat Creek wetlands.

Futher explanation can be provided, if necessary, by: John Antenucci. They may be reached by phoning: 383-2472

X We feel that a meeting is ~~required~~ desirable.

E. Ted Bishop 5-1-75
Signature

GEORGE F NEIMEYER
DIRECTOR

...'S HOUSE 113

PARKER ANDREWS
CHIEF, SOLID WASTE DIVISION

DEPARTMENT OF PUBLIC WORKS
1 HARRY S. TRUMAN PARKWAY
ANNAPOLIS, MARYLAND 21401
268-4300

April 9, 1975

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

Dear Mr. Camponeschi;

RE: Anne Arundel County
Sanitary Landfill
Governors Bridge Road
Davidsonville, Maryland

I am in receipt of your letter dated April 4, 1975 in reference to the property on Governors Bridge Road currently being leased by Anne Arundel County for sanitary landfill purposes.

Attached please find a plat which indicates that portion of the Robert J. Walton property currently under lease to the County.

Our plans call for the use of this site until approximately June 30, 1977.

If I can be of any further help to you in this matter, please do not hesitate to call.

Very truly yours,

Parker Andrews, Chief,
Solid Waste Division

PA:rb
Att.

114

BUREAU OF ENGINEERING
EUGENE C HARVEY
CHIEF
DANIEL TSAMOURAS
ASSISTANT CHIEF
ELEANORA T VELENOVSKY
MANAGEMENT ASSISTANT

ANNE ARUNDEL COUNTY MARYLAND

375 MD 6 AM 11 14

BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
1 HARRY S. TRUMAN PARKWAY
ANNAPOLIS, MARYLAND 21401
268-4300 269-0800

DIVISION CHIEFS
WM E BALDWIN
DEVELOPMENT SERVICES
JOSEPH A MAYER
DRAFTING
JAMES H MILLER
GENERAL ENGINEERING
JOHN CHRISTHILF
INSPECTION
DIMITRI SFAKIYANUDIS
ROADS DESIGN
JAMES F COX
SURVEY
RAYMOND E STREIB
TRAFFIC ENGINEERING
JACK A. HURLBERT
UTILITY DESIGN

March 4, 1975

Maryland Department of Transportation
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21203

ATTENTION: Mr. Eugene T. Camponeschi:

Re: Contract No: AA 669-000-571
Maryland Rt. 424 & 214
Proposed Relocation

Dear Mr. Camponeschi:

Reference is made to your letter of February 18, 1975 to Mrs. McCoy through which you have requested from Mr. Neimeyer information on any proposed or on-going Capital Improvement Projects within the study area of the subject project.

Attached you will find the following:

(a) Central Avenue Water Treatment Plant Capital Project Description. Project W 56378

(b) Central Avenue Complex Capital Project Description Project C 52226

(c) A map showing the Developments being reviewed or approved by Anne Arundel County Department of Public Works Development Services Division in the vicinity of the subject project.

(d) 1"=200' Topographic map and 1"=40' R/W plan for the existing County Southern District Road Operation Yard.

The above listed information covers all on-going Capital Projects and existing facilities in the area.

Contract No: AA-669-000-571

Should you have any questions on the above or if you need any additional information please feel free to contact me at your convenience.

Very truly yours,

DEPARTMENT OF PUBLIC WORKS

Dimitri Sfakiyanudis, Chief
Roads Design Division

DS:mg
cc: George F. Neimeyer
Marion J. McCoy
Eugene C. Harvey
Jack A. Hurlbert
James H. Miller
William E. Baldwin
Donald Asher

116

IN HOUSE
CONSULTANT

HERBERT M. SACHS
DIRECTOR

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BUILDING
ANNAPOLIS, MARYLAND 21401

1975 JAN 31 AM 10 07

January 30, 1975

Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
State Highway Administration
Post Office Box 717
300 West Preston Street
Baltimore, Maryland 21203

Re: Contract No. AA 669-571; Maryland Route 424 Relocated From east of the U.S. 50/301 Interchange to Maryland Route 214 Maryland Route 214 Relocated from Maryland Route 424 Relocated to Maryland Route 468

ATTENTION: Mr. William Hopkins

Dear Mr. Camponeschi:

Although the relocated portion of the above captioned project does not appear to encroach upon tidal marsh, the potential disturbance to the Beards Creek Marsh is substantial. The Wetlands Staff of this Administration offers the following information to assist you in the Environmental Assessment.

(1) The Flat Creek and Beards Creek watersheds are noted for moderate Wood Duck and very large squirrel populations. Dominant trees include maple, oak, willow, walnut, holly and dogwood. The common shrubs include alder, myrtle, blackberry and greenbrier.

(2) Attached are two maps depicting the vegetative composition of the tidal marsh. These maps were prepared by the Smithsonian Institution-Chesapeake Bay Center for Environmental Studies.

CAMPONESCHI
DORSEY
UH.

(3) Also enclosed is a copy of the Anne Arundel County Wetland Map 148 showing those areas under the jurisdiction of the Wetlands Act.

As a result of our preliminary review, we hope your office would consider the development of an alternate relocated portion closer to existing Maryland 214 in the vicinity of Beards Creek Marsh.

Sincerely,

Jeffrey O. Smith

JOS:klm
Enclosures

OFFICE OF COUNTY EXECUTIVE

ROBERT A PASCAL
County Executive

November 5, 1976

Mr. Bernard M. Evans, Administrator
Maryland State Highway Administration
300 West Preston Street
Baltimore, Maryland 21203

Dear Mr. Evans:

It has recently come to our attention that the Maryland Route 424 project study is proceeding with four alternatives, none of which reflect the preferred alternative that is supported by the County government and the majority of citizens in the area.

We appreciate the technical problems involved in this process. However, we would like to emphasize that this project was not proposed primarily to serve large volumes of traffic, but to provide a safer road which would minimize impact on the residential communities and provide maximum service to the local citizens and businessmen as well.

The line that we believe would best respond to needs and desires of Anne Arundel County would be similar in part to study line No. 2, which is on new location from U. S. Route 50-301 to Md. Rte. 214, and from that point, the existing alignment of Route 214 should be widened and improved, but not to expressway standards. The county will not approve or support any other alternative.

This preference was expressed by the citizens and county representatives who were present at the public project meeting on April 8, 1976. Since this is the overwhelming choice of the county, it does not seem appropriate to eliminate it from the final phases of the study solely on technical grounds. Especially when it has not been clearly demonstrated that this alternative would be inadequate.

We are requesting, therefore, that the State Highway Administration reconsider the question and include the above-described alternative in the complete study analysis. It should be evaluated for adequacy and compatibility with State and County goals as well as for its technical sufficiency. We would not be surprised if this alternative proves to be less costly to the State as well.

We are also concerned about the Md. Route 214 corridor east of Collison's Corner, and the status of future improvements all the way to Beverly Beach. In view of the highway project funding situation, what means do we have for improving roads, such as Md. Route 214, which are not in the Five Year Program now?

If you would care to discuss these matters, we would be pleased to arrange a meeting with you. Your consideration will be greatly appreciated.

Sincerely,

Robert A. Pascal
County Executive

RAP/smg

120

Anne Arundel County

Office of Planning & Zoning

Annapolis, Maryland 21404

January 13, 1976

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

Re: Maryland Routes 424 and 214,
Draft Interim Location Report

Dear Mr. Camponeschi:

Anne Arundel County has reviewed the report which accompanied your letter of December 12, 1975, and there are several points that we would like to emphasize as the County's opinion regarding the Maryland Route 424 project.

In general, we recognize the need to improve the safety characteristics and traffic capacity of Maryland Route 424 and 214, as well as Maryland Route 2 north of Route 214. We prefer a relocation of Maryland 424 rather than a reconstruction of the existing road because of the impact on existing homes and historic sites, also because it provides a shorter route for through trips that will conserve considerable energy as future traffic increases. However, the controlled access design should be limited to that segment between U.S. Route 50-301 and Maryland Route 214, with access only at designated roads. From the point where the relocated Route 424 intersects Route 214, the improvement project should follow existing Route 214 eastward to Collison's Corner, as a 4 lane urban highway. Further studies should develop this alternative. We suggest that ultimate design sections include a 60 foot curbed roadway on an 80 foot right of way as a minimum acceptable design. Ideally, we suggest a right of way of 120 feet to accommodate an ultimate 6 lane divided urban highway along existing Maryland 214. Initial project costs should be estimated on the basis of a 4 lane divided road with a 16 foot curbed median and shoulders on outside lanes. This type of road facility will be more than adequate to accommodate traffic beyond 1995. We believe that an extension of the relocated expressway section between Md. 214 and Md. 468 is excessive and fails to serve predominant local needs. The above recommendation is consistant with the General Development Plan of Anne Arundel County, adopted in 1968 and revised in 1972.

The Report considers only an expressway alternative with a 200 foot right-of-way and a 68 foot median for all lines. Because of this, and our above recommendations, the comparison of alternatives, including costs impact, etc., is not considered to be complete or fully comprehensive.

Specific comments relating to the Report are as follows;

B-1 and D-1: Reference is made to the intersection of Maryland 2 and Maryland 214 as a "hazardous intersection". No accident data is included to substantiate this point. There are many ways to improve the safety of this intersection with good channelization and signals.

C-1: We cannot understand why there is such a wide variation in traffic projections between the full relocation and the partial relocation alternatives. In fact, because parallel roads would exist if a full relocation plan is followed, it is more likely that future traffic will be split and the new road would carry less traffic than an alternative which upgrades existing Maryland 214. If a new relocation could possibly have such an effect as attracting large commuter traffic volumes from U.S. Route 50-301, then we would strenuously oppose a full relocation option. We do not intend to encourage a large proportion of commuter oriented workers to reside in the Mayo peninsula area.

C-2: We do not believe it is necessary to provide a 200 foot right of way throughout since it would obviously create excessive property damage and relocation impact. The same holds true for the typical 64 foot median, which may be appropriate to a high speed expressway but not to an urban type highway.

E-4: The proximity of existing dwellings is a relative factor that will change with time. In the long run, new housing will be built near any new road regardless of alternate locations.

E-4: Highway generated noise is listed as a disadvantage to several alternates yet page F-1 of the report states that, neither air quality nor noise is found to be significant in this study.

G-2: There does not appear to be any appreciable difference in noise impact on schools as it relates to distance, since the future school buildings will be closer to the relation alignment and the existing elementary school is closer to Maryland 214. We anticipate, however, that noise generated by expressway traffic is more objectionable than slower traffic on urban type highways. The noise levels in the report were based upon P.M. Peak hour volumes between 5 and 6 p.m. This time period would not affect normal school operations. We support the use of earth berms not only for noise suppression but for visual screening as well.

G-3: We find the Environmental Impact Assessments to be non-valid since they do not consider the alternates that we have described.

H-1: Any further consideration of alternate 5 should be limited to upgrading of the existing road to provide a safe arterial highway. We cannot support an expressway design along this route as a realistic alternative.

H-1: We agree that the project should be divided into two segments for detailed design, but the overall alignment must first be resolved in order to design the interim intersection at Maryland 214.

H-1: (a) We find most of the guidelines acceptable, but it should be noted that the "Character of Travel" is not entirely inter-regional. It is mixed with a considerable percentage of local trips. (b) The Steuart Level area is not a "Small Urban Area" by technical definition, nor is the Mayo Peninsula. (c) The expressway design type should be limited to the relocated portion of the project. Various levels of partial control of access should be studied in further detail along existing Maryland 214, and not be restricted to 2500 feet for spacing.

H-3: Any study of interchanges with Maryland Route 2 must be predicated on a study of alternates for Route 2 as well.

In conclusion, we recommend that further studies take a more detailed look at alignments 1, 2, 4, and 8 for the western segment with a connection to Maryland 214, thence following the existing right-of-way and looking at various alternate cross sections and levels of control. The report does not point out that any relocation alternative in the eastern segment would not serve the large population in the Woodland Beach or Southdown Shores areas who would continue to use existing Maryland Route 2 and 214, (with the exception of Alternate 7). The County School Board has voiced objections to the undesirable impact of a relocated road on the new school complex.

The alignment of Alternate 7 parallel to Maryland 214 is preferable to alternates 2, 4, 6 & 8, but we believe it is unnecessarily excessive. That portion of Alternate 7 (shown on Appendix B) which indicates a future alignment of Maryland Route 2 is a viable alternative which we encourage for further study.

Thank you for this opportunity to review the Draft Interim Location Report. If you feel that these opinions require further discussion, we would be pleased to arrange a meeting.

Sincerely yours,

Florence Beck Kurdle

Florence Beck Kurdle
Planning and Zoning Officer

FBK/RD/jls

123

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
DELMARVA AREA OFFICE
1825 VIRGINIA STREET
ANNAPOLIS, MD 21401

November 21, 1980

Mr. Thomas W. Maurer, Jr.
Maywood Associates
Box 626, RD 2
Annville, PA 17003

Dear Mr. Maurer:

This responds to your October 31, 1980, request for information on the presence of Federally listed or proposed endangered or threatened species within the impact area of the proposed improvement of Maryland Routes 424 and 214 in Anne Arundel County, Maryland.

Except for occasional transient individuals, no Federally listed or proposed species under our jurisdiction are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 Consultation is required with the Fish and Wildlife Service (FWS). Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to endangered species under our jurisdiction. It does not address other FWS concerns under the Fish and Wildlife Coordination Act or other legislation.

A list of Federally listed and proposed endangered and threatened species in Maryland is enclosed for your information. Please contact Andy Moser (301-269-6324), our Endangered Species Specialist, if you need further assistance.

Sincerely yours,

John D Green

John D. Green
Area Manager

Enclosure

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MARYLAND

Common Name	Scientific Name	Status	Distribution
FISHES:			
Darter, Maryland	Etheostoma sellare	E	Hartford County
Sturgeon, shortnose*	Acipenser brevirostrum	E	Atlantic coastal rivers
REPTILES:			
Turtle, green*	Chelonia mydas	T	Oceanic summer visitor coastal waters
Turtle, hawksbill*	Eretmochelys imbricata	E	Oceanic summer visitor coastal waters
Turtle, leatherback*	Dermochelys coriacea	E	Oceanic summer resident coastal waters
Turtle, loggerhead*	Caretta caretta	T	Oceanic summer resident coastal waters rarely nests: Worcester County
Turtle, Atlantic Ridley*	Lepidochelys kempii	E	Oceanic summer resident coastal waters
BIRDS:			
Eagle, bald	Haliaeetus leucocephalus	E	Entire state
Falcon, American peregrine	Falco peregrinus anatum	E	Entire state - re-establishment to former breeding range in progress
Falcon, Arctic peregrine	Falco peregrinus tundrius	E	Entire state migratory - no nesting
Warbler, Kirtland's	Dendroica kirtlandii	E	Entire state - occasional migrant
Woodpecker, red-cockaded	Picoides borealis	E	Dorchester and Worcester Counties
MAMMALS:			
Bat, Indiana	Myotis sodalis	E	Washington and Allegany Counties
Cougar, eastern	Felis concolor cougar	E	Entire state - probably extinct
Squirrel, Delmarva Peninsula fox	Sciurus niger cinereus	E	Dorchester, Talbot, Kent and Queen Annes Counties
Whale, blue*	Balaenoptera musculus	E	Oceanic
Whale, finback*	Balaenoptera physalus	E	Oceanic
Whale, humpback*	Megaptera novaeangliae	E	Oceanic
Whale, right*	Eubalaena spp. (all species)	E	Oceanic
Whale, sei*	Balaenoptera borealis	E	Oceanic
Whale, sperm*	Physeter catodon	E	Oceanic

Region 5 - 2/19/80 - 2pp.

MOLLUSKS:
None

PLANTS:
None

*Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service.

Region 5 - 2/19/80 - 2pp.

Appendix

TRAFFIC DATA

Alternate A	1977	1985	1997	2005
U.S. 50/301 to Rutland Road	9,000	14,500	21,400	24,925
Rutland Road to Riva Road	6,200	9,050	13,200	16,025
Riva Road to Beards Point Road	5,250	7,800	11,500	14,000
Beards Point Road to MD Route 214	6,775	10,600	16,400	19,725
MD Route 214 to MD Route 2	5,300	7,900	11,900	14,175
MD Route 2 to MD Route 468	8,800	12,000	16,750	19,600
MD Route 468 to Mayo	10,800	14,800	20,750	24,250

Alternate B and No-Build	1977	1985	1997	2005
U.S. 50/301 to Rutland Road	7,900	12,000	19,000	22,000
Rutland Road to Governor Bridge Road	7,950	12,050	19,000	22,000
Governor Bridge Road to MD 214	7,600	8,700	18,000	21,600
MD 214 to Vicksburg Drive	12,000	17,500	26,000	30,800
Vicksburg Drive to Riva Road	10,500	15,500	22,800	22,450
Riva Road to Beards Point Road	9,475	14,000	20,800	25,050
Beards Point Road to Pikes Ridge Road	10,500	16,200	25,000	30,000
Pikes Ridge Road to MD Rte. 2	8,100	13,050	20,450	25,100
Route 2 to Londontown Road	15,100	21,200	30,450	36,100
Londontown Road to MD 253	13,100	18,600	27,200	32,000
MD 253 to MD Route 468	16,300	22,400	31,650	37,000
MD Route 468 to Mayo	10,800	14,800	20,750	24,250

Alternate C	1977	1985	1997	2005
U.S. 50/301 to Rutland Road	7,900	12,000	19,000	22,000
Rutland Road to Governor Bridge Road	7,950	12,050	19,000	22,000
Governor Bridge Road to MD Rte. 214	7,600	8,700	18,000	21,600
MD Route 424 to Vicksburg Drive	12,000	17,500	26,000	30,800
Vicksburg Drive to Riva Road	10,500	15,500	22,800	27,450
Riva Road to Beards Point Road	9,475	14,000	20,800	25,050
Beards Point Road to Reloc. Rt. 214	10,500	16,200	25,000	30,000
Route 214 to MD Route 2	5,300	7,900	11,900	14,175
MD Route 2 to MD Route 468	8,800	12,000	16,750	19,600
MD Route 468 to Mayo	10,800	14,800	20,750	24,250

Alternate D				
U.S. 50/301 to Rutland Road	9,900	14,500	21,400	24,925
Rutland Road to Riva Road	6,200	9,050	13,200	16,025
Riva Road to Beards Point Road	5,250	7,800	11,500	14,000
Beards Point Road to MD 204	6,775	10,600	16,400	19,725
MD Route 424 Reloc. to Pike Ridge	10,100	15,600	24,950	30,000
Pike Ridge Road to MD Rte. 2	8,100	13,050	20,450	25,100
MD Route 2 to Londontown Road	15,100	21,200	30,450	36,100
Londontown Road to MD Route 253	13,100	18,600	27,200	32,000
MD Route 253 to MD Route 468	16,300	22,400	31,650	37,000
MD Route 468 to Mayo	10,800	14,800	20,750	24,250

AREA NUMBER - 02079[illegible]002131003

INVENTORY DATE - 08/05/76

COMMUNITY TYPES - 2
NEAREST TOWN - COLLISON CORNER
ELECTION DISTRICT - NUMBER 7

GEOLOGY - AQUIA FORMATION
ELEVATION - 020 FEET
WATERSHED - WEST CHESAPEAKE BAY

AND FLOODPLAIN WITH REPORTED EAGLE NESTS IN SURROUNDING UPLANDS

GS, SWAMPS, FLATS (INLAND)

MARGINAL WETLAND HABITIAT

SITE #2800 (GLEBE BRANCH) - TOTALLY WITHIN PROJECT LIMITS

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MAL
- MANAGED FOREST
- ROAD
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-400 FEET
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GLEBE BRANCH NATURAL AREA IS OF 25 ACRES, LOCATED JUST SOUTH OF MD. RTE. 214, AND WEST OF COLLISON CORNER. NORTH OF RTE. 214 THE VEGETATION HAS BEEN CUT, AND SO CONSEQUENTLY HAS BEEN EXCLUDED. THE UPLANDS SURROUNDING GLEBE BRANCH HAVE ALSO BEEN CUT AND ARE A REGROWTH OF YOUNG VEGETATION. EAGLE NESTS HAVE BEEN REPORTED TO BE IN THIS UPLAND PART, BUT A SEARCH PROVED TO BE FRUITLESS. THE SITE ITSELF IS OF A SMALL POND AND SHRUB SWAMP, AND THE FLOODPLAIN ALONG GLEBE BRANCH. THE SHRUB SWAMP SUB-SECTION IS OF APPROXIMATELY 5 ACRES, AND IS CHARACTERIZED BY GREEN ASH, RED MAPLE, BLACK GUM, AND WILLOW IN THE SPARSE UNDERSTORY, WITH ALDER, BUTTONBUSH, ELDER, SWAMP ROSE, AND OTHERS PRESENT IN THE SHRUB LAYER. CAREX, IMPATIENS, POLYGANUM, AND OTHERS ARE IN THE VERY WET HERBACEOUS LAYER. GREAT BLUE HERON, GREEN HERON, SOLITARY SANDPIPER, AND NORTHERN WATERTHRUSH WERE SEEN IN THIS SHRUB SWAMP. THE FLOODPLAIN CANOPY LAYER IS MADE UP OF SYCAMORE, GREEN ASH, RED MAPLE, AND ELM. THE UNDERSTORY CONTAINS THESE SAME SPECIES, AND IRONWOOD, WITH SPICEBUSH, ARROW-WOOD, ELDER, WINTERBERRY HOLLY, AND OTHERS IN THE SHRUB LAYER. THE DENSE AND DIVERSE HERBACEOUS LAYER IS COMPRISED OF HONEYSUCKLE, IMPATIENS, FALSE NETTLE, LIZARD'S TAIL, JACK-IN-THE-PULPIT, AND OTHERS.

THIS SITE ALSO RECOMMENDED AS A CRITICAL AREA BY THE MARYLAND WILDLIFE ADMINISTRATION.

INFORMATION SOURCE: NONE

121

AREA NUMBER - 0207900002131007 INVENTORY DATE - 06/25/76

COMMUNITY TYPES - 3
NEAREST TOWN - BIRDSVILLE
ELECTION DISTRICT - NUMBER 7

GEOLOGY - *AQUIA FORMATION
ELEVATION - 50 FEET
WATERSHED - WEST CHESAPEAKE BAY

EAM, FLOODPLAIN, AND SURROUNDING UPLAND FOREST ON BEARD'S CREEK

OF UNUSUAL SIGNIFICANCE TO A BIRD COMMUNITY

EXHIBITING OTHER INTERESTING FEATURES

SITE #3000 (BEARD'S CREEK) - SMALL NORTHERN PART WITHIN PROJECT LIMITS.

'E INDIVIDUAL

OR 5 YEARS

LY PERMANENT

TE

ROAD
MANAGED FOREST
AGRICULTURE

R JAN 1200 FEET

THIS SITE OF 508 ACRES CONTAINS BEARD'S CREEK, A TRIBUTARY OF THE SOUTH RIVER. IT RUNS FROM THE MOUTH OF THE CREEK, A LARGE TIDAL MARSH, SOUTHWEST TO THE HEADWATERS. THE STREAM AND ITS FLOODPLAIN ARE SURROUNDED BY AN EXTENSIVE UPLAND OAK FOREST, PORTIONS OF WHICH HAVE BEEN CUT. THESE UPLAND PORTIONS HAVE A ROLLING TOPOGRAPHY, AND TRAILS RUN THROUGH THEM. THE UPLAND BUFFERS THE FLOODPLAIN FROM AGRICULTURAL FIELDS. THE FLOODPLAIN IS CANOPIED BY SYCAMORE, RED MAPLE, TULIP POPLAR, GREEN ASH, AND SWEET GUM. THE UNDERSTORY CONTAINS PAW-PAW, CARPINUS, AND ELM. THE SHRUB LAYER IS SPARSE, AND THE HERB LAYER IS DOMINATED BY HONEYSUCKLE AND OTHER WOODY VINES. THE STREAM HAS STEEP BANKS AND A SILT BOTTOM. THE UPLAND OAK FOREST IS CANOPIED BY WHITE OAK, CHESTNUT OAK, NO. RED OAK, AND VIRGINIA PINE. THE UNDERSTORY CONTAINS OAKS, HOLLY, AND BLACK GUM. THE SHRUB LAYER IS DENSE AND VARIED WITH MT. LAUREL, AZALEA, BLACK HUCKLEBERRY, AND HOLLY. THIS EXTENSIVE FLOODPLAIN AND AND UPLAND FOREST PROVIDE VALUABLE HABITAT FOR BIRDS AND OTHER WILDLIFE.

INFORMATION SOURCE: JESSICA HALL BRICK CHURCH ROAD DAVIDSONVILLE MD PART-OWNER

130

AREA NUMBER - 020?0340002131003

INVENTORY DATE - 08/11/76

COMMUNITY TYPES - 4
NEAREST TOWN - DAVIDSONVILLE
ELECTION DISTRICT - NUMBER 7

GEOLOGY - *AQUIA FORMATION
ELEVATION - 50 FEET
WATERSHED - WEST CHESAPEAKE BAY

ND ASSOCIATED WETLANDS SURROUNDED BY MATURE UPLAND FOREST-VALUABLE WILDLIFE HABITAT

CENIC AREA
ARGINAL WETLAND HABITIAT
A EXHIBITING OTHER INTERESTING FEATURES SITE #3400 (FLAT CREEK) - LARGELY WITHIN PROJECT LIM

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AGRICULTURE
RESIDENTIAL
OAD

ER THAN 1200 FEET

FLAT CREEK IS A 473 ACRE NATURAL AREA CONTAINING A SMALL STREAM AND ASSOCIATED WETLAND, SHRUB SWAMP, AND MATURE UPLAND FOREST. THIS LARGE EXPANSE OF UNDEVELOPED WOODLAND IS LOCATED ON THE SOUTHERN SHORE OF THE SOUTH RIVER. THE TERRAIN IS VARIED WITH VISTAS OF THE SOUTH RIVER MARSHES AND STEEP SLOPES ALONG THE SWAMP AND STREAM. THE AREA IS SURROUNDED BY PREDOMINANTLY AGRICULTURAL LAND. THE WETLAND ASSOCIATED WITH FLAT CREEK IS CANOPIED BY GREEN ASH, RED MAPLE, SYCAMORE, AND ELM WITH DBH'S OF 9 TO 12 INCHES. THE UNDERSTORY CONTAINS BLACK GUM, SWEETGUM, AND RED MAPLE. THE SHRUB LAYER IS OVERRUN WITH CATBRIER, AND THE HERB LAYER IS DENSE WITH WITH WOODY VINES SUCH AS HONEYSUCKLE AND POISON IVY. THE SOILS HERE ARE SATURATED AND CONTAIN SEASONAL STANDING WATER IN PLACES. NEAR THE MOUTH OF THE STREAM, A SMALL SHRUB SWAMP BORDERS THE SOUTH RIVER TIDAL MARSHES. WILLOW, ALDER, SILKY CORNEL, AND VARIOUS OTHER SHRUBS FORM DENSE STANDS AMIDST A DIVERSE HERBACEOUS COVER. THE UPLAND FOREST COVERS THE MAJORITY OF THE SITE WITH CHESTNUT OAK, TULIP POPLAR, BEECH, AND HICKORY WITH DBH'S OF 12 TO 18 INCHES. THE UNDERSTORY IS DOMINATED BY HOLLY AND MT. LAUREL. THIS FOREST BUFFERS FLAT CREEK FROM AGRICULTURAL FIELDS, THOUGH RESIDENTIAL DEVELOPEMENT IS OCCURRING IN THIS FOREST ALONG THE SOUTH RIVER. THIS SCENIC NATURAL AREA IN CONJUNCTION WITH THE ECOLOGICALLY IMPORTANT TIDAL MARSHES CONTAINS NUMEROUS UPLAND AND WETLAND WILDLIFE SPECIES.

THIS SITE ALSO RECOMMENDED AS A CRITICAL AREA BY THE MARYLAND WILDLIFE ADMINISTRATION (DASHED SUB-SECTION).

131

INFORMATION SOURCE: NONE

"SUMMARY OF THE RELOCATION ASSISTANCE PROGRAM OF THE STATE HIGHWAY ADMINISTRATION OF MARYLAND"

All State Highway Administration projects must comply with the provisions of the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (Public Law 91-646) and/or the Annotated Code of Maryland, Article 21, Sections 12-201 thru 12-209. The Maryland Department of Transportation, State Highway Administration, Bureau of Relocation Assistance, administers the Relocation Assistance Program in the State of Maryland.

The provisions of the Federal and State Law require the State Highway Administration to provide payments and services to persons displaced by a public project. The payments that are provided include replacement housing payments and/or moving costs. The maximum limits of the replacement housing payments are $15,000 for owner-occupants and $4,000 for tenant-occupants. In addition, but within the above limits, certain payments may be made for increased mortgage interest costs and/or incidental expenses. In order to receive these payments, the displaced person must occupy decent, safe and sanitary replacement housing. In addition to the replacement housing payments described above, there are also moving cost payments to persons, businesses, farms and non-profit organizations. Actual moving costs for residences include actual moving costs up to 50 miles or a schedule moving cost payment, including a dislocation allowance, up to $500.

The moving cost payments to businesses are broken down into several categories, which include actual moving expenses and payments "in lieu of" actual moving expenses. The owner of a displaced business is entitled to receive a payment for actual reasonable moving and related expenses in moving his business, or personal property; actual direct losses of tangible personal property; and actual reasonable expenses for searching for a replacement site.

The actual reasonable moving expenses may be paid for a move by a commercial mover or for a self-move. Generally, payments for the actual reasonable moving expenses are limited

to a 50 mile radius. In both cases, the expenses must be supported by receipted bills. An inventory of the items to be moved must be prepared, and estimates of the cost may be obtained. The owner may be paid an amount equal to the low bid or estimate. In some circumstances, the State may negotiate an amount not to exceed the lower of the two bids. The allowable expenses of a self-move may include amounts paid for equipment hired, the cost of using the business's vehicles or equipment, wages paid to persons who physically participate in the move, and the cost of the actual supervision of the move.

When personal property of a displaced business is of low value and high bulk, and the estimated cost of moving would be disproportionate in relation to the value, the State may negotiate for an amount not to exceed the difference between the cost of replacement and the amount that could be realized from the sale of the personal property.

In addition to the actual moving expenses mentioned above, the displaced business is entitled to receive a payment for the actual direct losses of tangible personal property that the business is entitled to relocate but elects not to move. These payments may only be made after an effort by the owner to sell the personal property involved. The costs of the sale are also reimbursable moving expenses. If the business is to be reestablished, and personal property is not moved but is replaced at the new location, the payment would be the lesser of the replacement costs minus the net proceeds of the sale or the estimated cost of moving the item. If the business is being discontinued or the item is not to be replaced in the reestablished business, the payment will be the lesser of the difference between the value of the item for continued use in place and the net proceeds of the sale or the estimated cost of moving the item.

If no offer is received for the personal property and the property is abandoned, the owner is entitled to receive the lesser of the value for continued use of the item in place or the estimated cost of moving the item and the reasonable expenses of the sale. When personal property is abandoned without an effort by the owner to dispose of the property by sale, the owner will not be entitled to moving expenses, or losses for the item involved.

The owner of a displaced business may be reimbursed for the actual reasonable expenses in searching for a replacement business up to $500. All expenses must be supported by receipted bills. Time spent in the actual search may be reimbursed on an hourly basis, but such rate may not exceed $10 per hour.

In lieu of the payments described above, the State may determine that the owner of a displaced business is eligible to receive a payment equal to the average annual net earnings of the business. Such payment shall not be less than $2,500 nor more than $10,000. In order to be entitled to this payment, the State must determine that the business cannot be relocated without a substantial loss of its existing patronage, the business is not part of a commercial enterprise having at least one other establishment in the same or similar business that is not being acquired, and the business contributes materially to the income of a displaced owner.

Considerations in the State's determination of loss of existing patronage are the type of business conducted by the displaced business and the nature of the clientele. The relative importance of the present and proposed locations to the displaced business, and the availability of suitable replacement sites are also factors.

In order to determine the amount of the "in lieu of" moving expenses payment, the average annual net earning of the business is considered to be one-half of the net earnings before taxes, during the two taxable years immediately preceding the taxable year in which the business is relocated. If the two taxable years are not representative, the State, with approval of the Federal Highway Administration, may use another two-year period that would be more representative. Average annual net earnings include any compensation paid by the business to the owner, his spouse, or his dependents during the period. Should a business be in operation less than two years, but for twelve consecutive months during the two taxable years prior to the taxable year in which it is required to relocate, the owner of the business is eligible to receive the "in lieu of" payment. In all cases, the owner of the business must provide information to support its net earings, such as income tax returns, for the tax years in question.

The relocation assistance officer located in each district office maintains a listing of local, State, and Federal programs which may benefit displaced businesses.

For displaced farms and non-profit organizations, actual reasonable moving costs generally up to 50 miles, actual direct losses of tangible personal property, and searching costs are paid. The "in lieu of" actual moving cost payments provide that the State may determine that a displaced farm may be paid a minimum of $2,500 to a maximum of $10,000 based upon the net income of the farm, provided that the farm has been discounted or relocated. In some cases, payments "in lieu of" actual moving costs may be made to farm operations that are affected by a partial acquisition. A non-profit organization is eligible to receive "in lieu of" actual moving cost payments, in the amount of $2,500.

A more detailed explanation of the benefits and payments available to displaced persons, businesses, farms, and non-profit organizations is available in Relocation Brochures that will be distributed at the public hearings for this project and will also be given to displaced persons individually in the future.

In the event comparable replacement housing is not available to rehouse persons displaced by public projects or that available replacement housing is beyond their financial means, replacement "housing as a last resort" will be utilized to accomplish the rehousing. Detailed studies will be completed by the State Highway Administration and approved by the Federal Highway Administration before "housing as a last resort" could be utilized. "Housing as a last resort" could be provided to displaced persons in several different ways although not limited to the following:

1. An improved property can be purchased or leased.

2. Dwelling units can be rehabilitated and purchased or leased.

3. New dwelling units can be constructed.

4. State acquired dwellings can be relocated, rehabilitated, and purchased or leased.

Any of these methods could be utilized by the State Highway Administration and such housing would be made available to displaced persons. In addition to the above procedure, individual replacement housing payments can be increased beyond the statutory limits in order to allow a displaced person to purchase or rent a dwelling unit that is within his financial means.

The "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" requires that the State Highway Administration shall not proceed with any phase of any project which will cause the relocation of any person, or proceed with any construction project until it has furnished satisfactory assurances that the above payments will be provided and that all displaced persons will be satisfactorily relocated to comparable decent, safe and sanitary housing within their financial means or that such housing is in place and has been made available to the displaced person.