

ENVIRONMENTAL ASSESSMENT

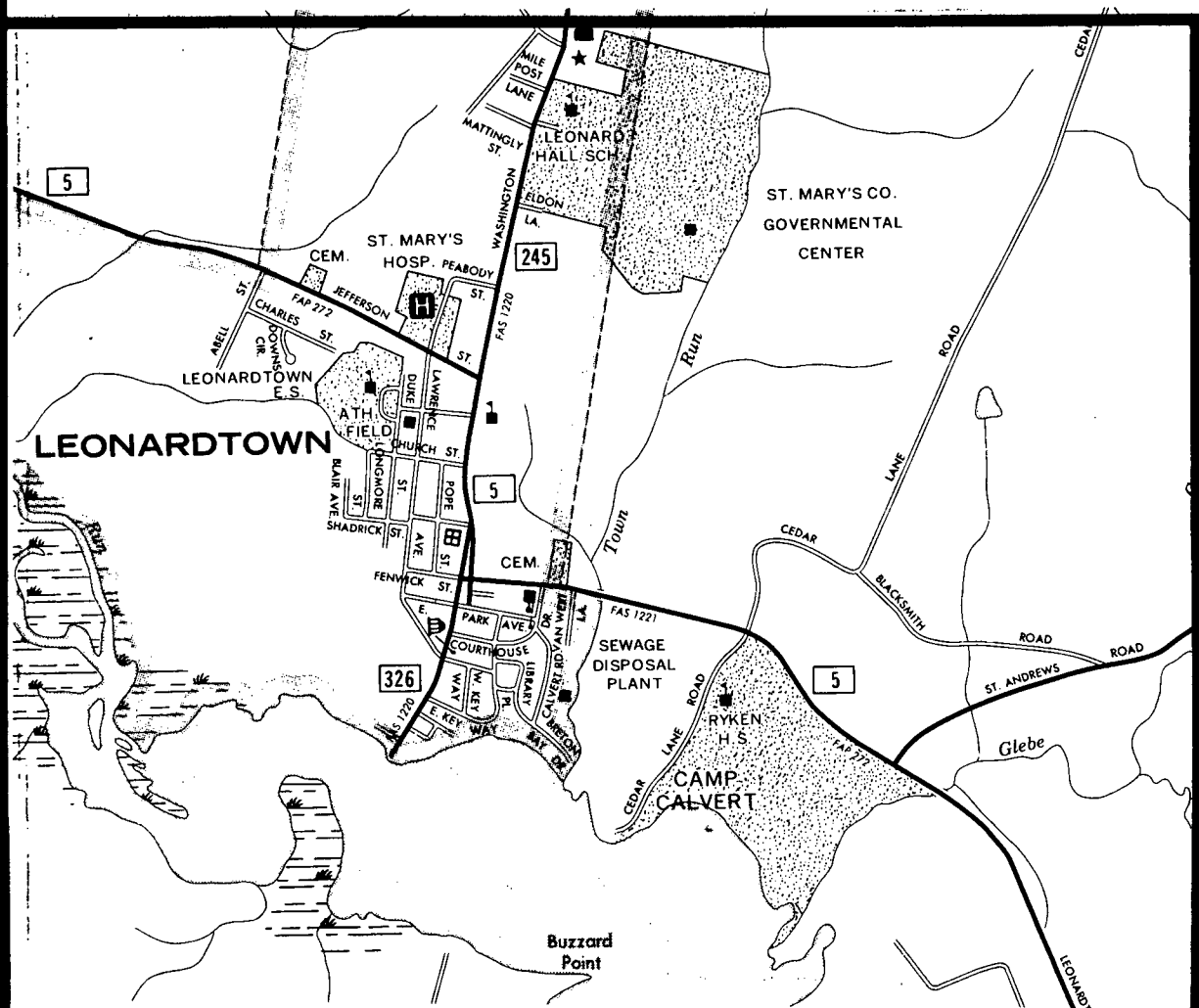
FOR

CONTRACT NO. SM 714-102-571

MARYLAND ROUTE 5

at LEONARDTOWN

ST MARY'S COUNTY



prepared by
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

and
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

SUMMARY

SUMMARY

1. ADMINISTRATIVE ACTION

- (x) Environmental Assessment
- () Environmental Impact Statement
- () Section 4(f) Evaluation

2. ADDITIONAL INFORMATION

Additional information concerning this action may be obtained by contacting:

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 Deputy Director
 Project Development Division
 State Highway Administration
 707 North Calvert Street
 Baltimore, Maryland 21202
 Telephone: (301) 659-1130
 Hours: 8:15 a.m. - 4:15 p.m.

Mr. Edward Terry
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 Federal Highway Administration
 The Rotunda - Suite 220
 711 West 40th Street
 Baltimore, Maryland 21211
 Telephone: (301) 962-4010
 Hours: 7:45 a.m. - 4:15 p.m.

3. DESCRIPTION OF PROPOSED ACTION

This project consists of the relocation of a portion of Maryland Route 5 at Leonardtown in St. Mary's County for a distance of approximately 1.3 miles (see Figures 1 and 2).

4. ALTERNATES CONSIDERED

The No-Build Alternate and two build alternates were selected for detailed studies.

Alternates 2 and 3 (Preferred) begin at the intersection of existing Maryland Route 5/Maryland Route 245. Both alternates extend easterly through the Maryland Route 5/Maryland Route 245 intersection, and then curve south to cross Cedar Lane Road just north of the existing Maryland Route 5/Cedar Lane Road intersection. Alternate 3 then merges with existing Maryland Route 5 and ends just east of Maryland Route 4.

Alternate 2, west of the Maryland Route 5/Maryland Route 245 intersection, remains north of Alternate 3 and crosses Cedar Lane Road approximately 1,000 feet north of the existing Maryland Route 5/Cedar Lane Road intersection. Alternate 2 then curves southeasterly to merge with Maryland Route 5 at the existing Maryland Route 5/Maryland Route 4 intersection.

Tie-ins are being considered for Alternates 2 and 3 to allow connections to Cedar Lane Road and the existing Maryland Route 5.

Both alternates would consist of a two-lane, 24-foot roadway, with 10-foot shoulders, and safety grading within a minimum 150-foot right-of-way.

5. SUMMARY OF ENVIRONMENTAL IMPACTS

A comparison of impacts for all alternates is shown in Table 1.

Beneficial impacts associated with the proposed relocation (bypass) of Maryland Route 5 include the separation of local and through traffic, the reduction of traffic congestion, and improved highway safety.

One residential structure and its detached garage/office would be required with Alternate 2, while Alternate 3 would require a vacant residence and its detached garage. Relocation assistance would be provided to those affected. No minority or handicapped individuals would be affected.

No property would be required from the historic boundaries of the only possible National Register Eligible site adjacent to the proposed alternates. No public park lands or archeological sites would be affected.

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TABLE 1
SUMMARY OF IMPACTS/COSTS
MARYLAND ROUTE 5

	<u>No-Build</u>	<u>Alternate 2</u>	<u>Alternate 3</u>
<u>Impacts</u>			
Prime Farmland	0	0.82 acres	0.87 acres
Minority Displacements	0	0	0
Residential Displacements	0	1	1 (vacant)
Office Displacements	0	1	0
Historical Sites Affected (Adversely)	0	0	0
Wetland Impacts	0	1.7 acres	1.4 acres
Floodplain Encroachment*	0	2.2 acres	1.8 acres
Stream Crossings	0	2	2
Threatened or Endangered Species Affected	0	0	0
Habitat Loss (Woodland)	0	15.5 acres	14.9 acres
Noise Level Impacts**	0	2	1
Air Quality Impacts (Sites Exceeding S/NAAQS)	0	0	0
Consistent with Land Use Plans	No	Yes	Yes
<u>Costs (\$)</u>			
Preliminary Engineering	0	\$ 214,886	\$ 201,933
Right-of-Way	0	735,885	576,640
Construction	0	<u>2,573,080</u>	<u>2,417,970</u>
TOTAL	0	\$3,523,851	\$3,196,543

*Includes the acreage of wetland encroachment.

**Sites exceeding criteria or sites where noise levels increase 10 dBA or more over ambient noise levels.

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Floodplain encroachment and non-tidal wetlands would be required. One stream crossing would occur with the proposed alternates. The following permits would be required for the proposed action: U.S. Army Corps - Section 404 Permit, Maryland Department of Natural Resources - Waterway Construction Permit, and a Department of Health and Mental Hygiene - Water Quality Certificate. Stormwater management and sediment/erosion control approvals would be obtained as required.

Woodlands and prime farmland soils would be required by both build alternates. No known threatened or endangered plant or animal species would be affected.

There are no violations of State or National Ambient Air Quality Standards. FHWA Noise Abatement Criteria would not be exceeded with the No-Build or the build alternates.

The proposed action is consistent with area land use plans while the No-Build Alternate is not.

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ENVIRONMENTAL ASSESSMENT FORM

The following Environmental Assessment Form is a requirement of the Maryland Environmental Policy Act and Maryland Department of Transportation Order 11.01.06.02. Its use is in keeping with the provisions of 1500.4(k) and 1506.2 and 1505.6 of the Council of Environmental Quality Regulations, effective July 31, 1979, which recommend that duplication of federal, state, and local procedures be integrated into a single process.

The checklist identifies specific areas of the natural and social-economic environment which have been considered while preparing this Environmental Assessment. The reviewer can refer to the appropriate pages of the document, as indicated in the "Comment" column of the form, for a description of specific characteristics of the natural and social-economic environment within the proposed project area. It will also highlight any potential impacts, beneficial or adverse, that the action may incur. The "No" column indicates that during the scoping and early coordination processes, that specific area of the environment was not identified to be within the project area or would not be impacted by the proposed action.

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
A. <u>Land Use Considerations</u>			
1. Will the action be within the 100-year floodplain?	<u>X</u>	<u> </u>	<u>IV-6</u> <u>IV-7</u>
2. Will the action require a permit for construction or alteration within the 100-year floodplain?	<u>X</u>	<u> </u>	<u>IV-7</u>
3. Will the action require a permit for dredging, filling, draining or alteration of a wetland?	<u>X</u>	<u> </u>	<u>IV-9</u> <u>IV-12</u>

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
4. Will the action require a permit for the construction or operation of facilities for solid waste disposal including dredge and excavation spoil?	_____	<u>X</u>	_____
5. Will the action occur on slopes exceeding 15%?	<u>X</u>	_____	I-13
6. Will the action require a grading plan or a sediment control permit?	<u>X</u>	_____	iv IV-8
7. Will the action require a mining permit for deep or surface mining?	_____	<u>X</u>	_____
8. Will the action require a permit for drilling a gas or oil well?	_____	<u>X</u>	_____
9. Will the action require a permit for airport construction?	_____	<u>X</u>	_____
10. Will the action require a permit for the crossing of the Potomac River by conduits, cables or other like devices?	_____	<u>X</u>	_____
11. Will the action affect the use of a public recreation area, park, forest, wildlife, management area, scenic river or wildland?	_____	<u>X</u>	_____
12. Will the action affect the use of natural or man-made features that are unique to the county, state or nation?	_____	<u>X</u>	_____
13. Will the action affect the use of an archeological or historical site or structure?	_____	<u>X</u>	_____
B. <u>Water Use Considerations</u>			
14. Will the action require a permit for the change of the course, current, or cross-section of stream or other body of water?	_____	<u>X</u>	_____

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
15. Will the action require the construction, alteration, or removal of a dam, reservoir, or waterway obstruction?	<u> </u>	<u> X </u>	<u> </u>
16. Will the action change the overland flow of stormwater or reduce the absorption capacity of the ground?	<u> X </u>	<u> </u>	<u> IV-8 </u>
17. Will the action require a permit for the drilling of a water well?	<u> </u>	<u> X </u>	<u> </u>
18. Will the action require a permit for water appropriation?	<u> </u>	<u> X </u>	<u> </u>
19. Will the action require a permit for the construction and operation of facilities for treatment or distribution of water?	<u> </u>	<u> X </u>	<u> </u>
20. Will the project require a permit for the construction and operation of facilities for sewage treatment and/or land disposal of liquid waste derivatives?	<u> </u>	<u> X </u>	<u> </u>
21. Will the action result in any discharge into surface or sub-surface water?	<u> X </u>	<u> </u>	<u> IV-8 IV-12 </u>
22. If so, will the discharge affect ambient water quality parameters and/or require a discharge permit?	<u> </u>	<u> X </u>	<u> </u>
<u>C. Air Use Considerations</u>			
23. Will the action result in any discharge into the air?	<u> X </u>	<u> </u>	<u> IV-19 IV-20 IV-21 </u>
24. If so, will the discharge affect ambient air quality parameters or produce a disagreeable odor?	<u> </u>	<u> X </u>	<u> </u>
25. Will the action generate additional noise which differs in character or level from present conditions?	<u> X </u>	<u> </u>	<u> IV-14 IV-15 </u>
26. Will the action preclude future use of related air space?	<u> </u>	<u> X </u>	<u> </u>

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
27. Will the action generate any radiological, electrical, magnetic, or light influences?	<u> </u>	<u> X </u>	<u> </u>
<u>D. Plants and Animals</u>			
28. Will the action cause the disturbance, reduction or loss of any rare, unique or valuable plant or animal?	<u> </u>	<u> X </u>	<u> </u>
29. Will the action result in the significant reduction or loss of any fish or wildlife habitats?	<u> </u>	<u> X </u>	<u> </u>
30. Will the action require a permit for the use of pesticides, herbicides or other biological, chemical or radiological control agents?	<u> </u>	<u> X </u>	<u> </u>
<u>E. Socioeconomic</u>			
31. Will the action result in a pre-emption or division of properties or impair their economic use?	<u> X </u>	<u> </u>	<u> IV-1 IV-2 </u>
32. Will the action cause relocation of activities, structures, or result in a change in the population density or distribution?	<u> X </u>	<u> </u>	<u> IV-1 IV-2 </u>
33. Will the action alter land values?	<u> </u>	<u> X </u>	<u> </u>
34. Will the action affect traffic flow and volume?	<u> X </u>	<u> </u>	<u> II-1 IV-2 </u>
35. Will the action affect the production, extraction, harvest or potential use of a scarce or economically important resource?	<u> </u>	<u> X </u>	<u> </u>
36. Will the action require a license to construct a sawmill or other plant for the manufacture of forest products?	<u> </u>	<u> X </u>	<u> </u>

	<u>Yes</u>	<u>No</u>	<u>Comments</u>
37. Is the action in accord with federal, state, regional and local comprehensive or functional plans, including zoning?	<u>X</u>	<u> </u>	iv I-12 IV-5
38. Will the action affect the employment opportunities for persons in the area?	<u>X</u>	<u> </u>	<u> </u>
39. Will the action affect the ability of the area to attract new sources of tax revenue?	<u>X</u>	<u> </u>	<u> </u>
40. Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocate elsewhere?	<u> </u>	<u>X</u>	<u> </u>
41. Will the action affect the ability of the area to attract tourism?	<u> </u>	<u>X</u>	<u> </u>
<u>F. Other Considerations</u>			
42. Could the action endanger the public health, safety or welfare?	<u> </u>	<u>X</u>	<u> </u>
43. Could the action be eliminated without deleterious affects to the public health, safety, welfare or the natural environment?	<u> </u>	<u>X</u>	II-1,-3,-9 II-10 III-1 IV-4
44. Will the action be of statewide significance?	<u> </u>	<u>X</u>	<u> </u>
45. Are there any other plans or actions (federal, state, county or private) that, in conjunction with the subject action could result in a cumulative or synergistic impact on the public health, safety, welfare or environment?	<u> </u>	<u>X</u>	<u> </u>
46. Will the action require additional power generation or transmission capacity?	<u> </u>	<u>X</u>	<u> </u>
47. This agency will develop a complete environmental effects report on the proposed action.	<u> </u>	<u> </u>	See Note

Note: An Environmental Assessment is being prepared.

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I DESCRIPTION
OF PROPOSED ACTION

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I. DESCRIPTION OF PROPOSED ACTION

A. Project Location

The Maryland Route 5 study corridor is located in and adjacent to the city of Leonardtown. Leonardtown is situated north of Breton Bay in St. Mary's County, Maryland (see Figure 1). Maryland Route 5 serves as a major north-south route in southern Maryland.

The project study area begins approximately 1,000 feet west of the Maryland Route 5/Maryland Route 245 intersection (see Figure 2). The study area includes the city of Leonardtown and extends east beyond the town limits to approximately 1,000 feet east of the Maryland Route 5/Maryland Route 4 (St. Andrews Church Road) intersection.

B. Project Description

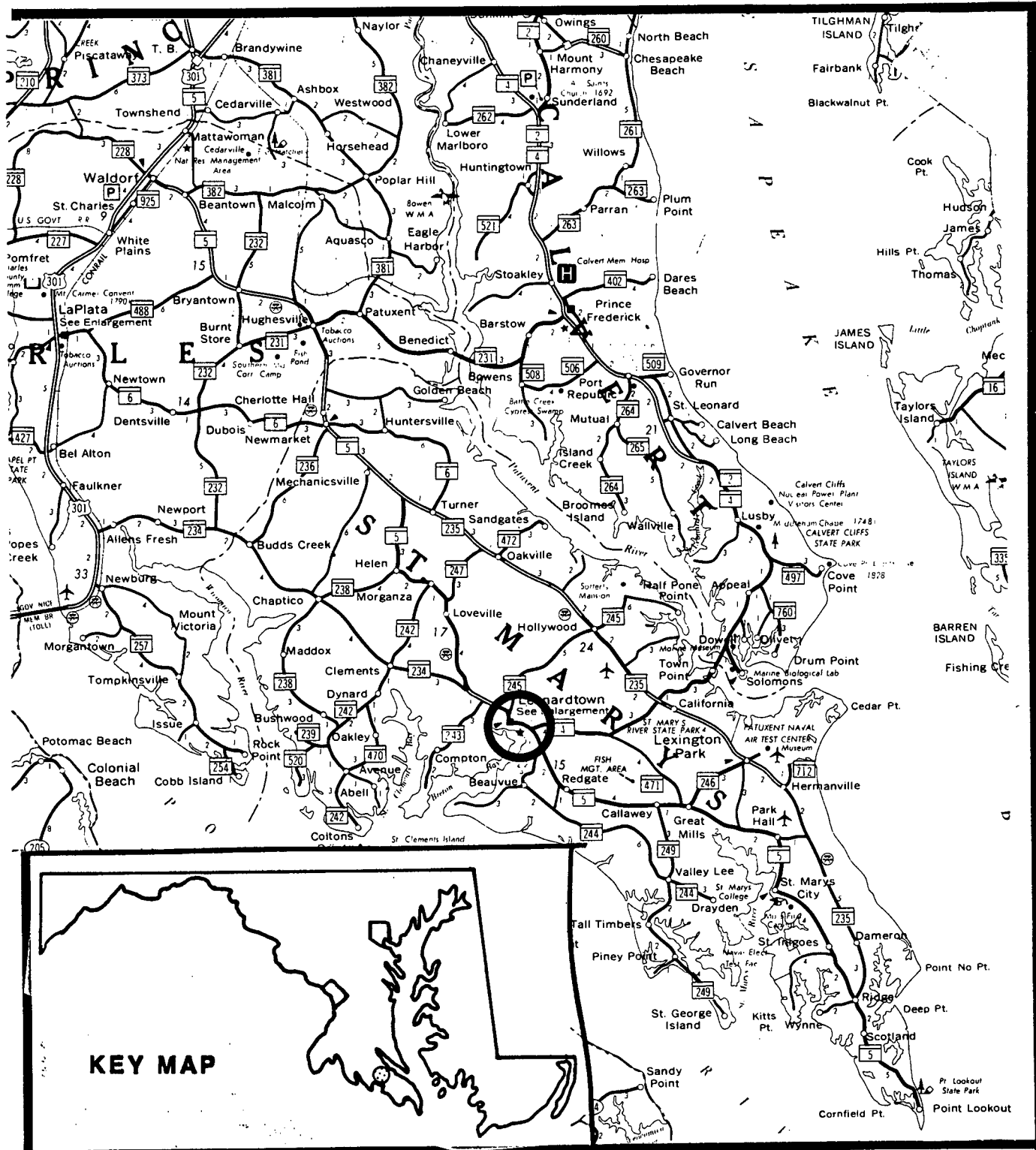
Maryland Route 5 is currently discontinuous through the city of Leonardtown. Traffic using Maryland Route 5 must perform several turns in central Leonardtown in order to proceed through the study area. The proposed action involves the relocation of Maryland Route 5 in Leonardtown. Relocated Maryland Route 5 consists of a bypass, which begins at the Maryland Route 5/Maryland Route 245 intersection, proceeds southeasterly and merges with existing Maryland Route 5 just east of Maryland Route 4 (St. Andrews Church Road). Two alternatives are currently being considered for this bypass.

C. Description of Existing Environment

1. Social Environment

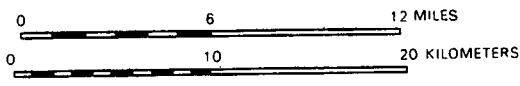
a. Population

St. Mary's County experienced moderate population growth compared to other Maryland counties from 1970 to 1980. According to the 1980 U.S. Census, its population grew by 26.4 percent during this period. Among the three counties in



KEY MAP

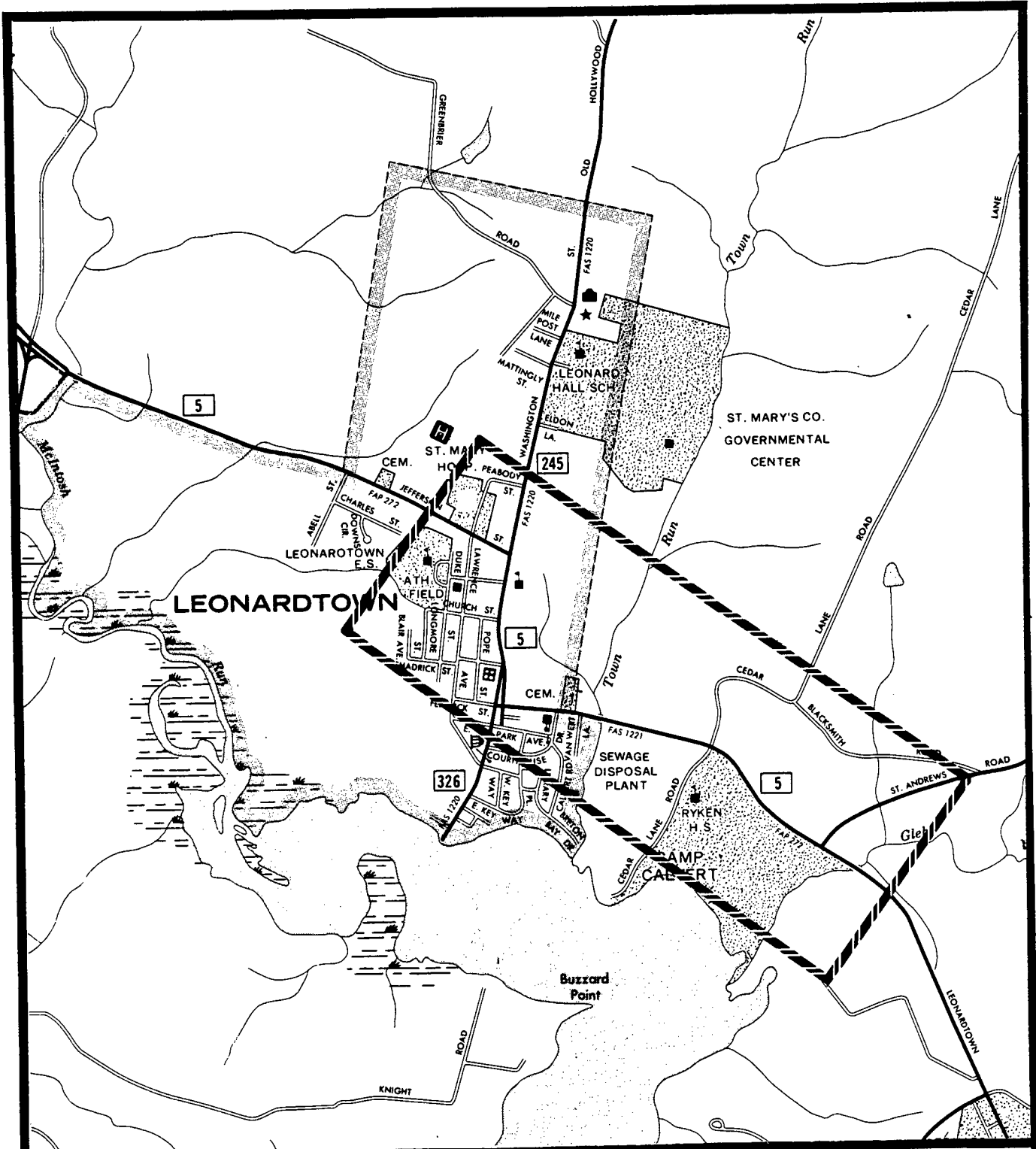
SCALE



MARYLAND ROUTE 5

LOCATION MAP

FIGURE 1



SCALE



MARYLAND ROUTE 5
LEONARDTOWN

STUDY AREA MAP

FIGURE 2

the Tri-County Region, St. Mary's County's growth was half that experienced by Charles and Calvert Counties. The Maryland Department of State Planning projects the county's population to increase by more than 21 percent by year 1995 (see Table 2).

Leonardtown is situated in the southern portion of St. Mary's County on Breton Bay, a tributary of the Potomac River, and became the county seat in 1708. The study area is part of Election District Three (see Figure 3). During the last decade, Leonardtown's population grew by 3.0 percent (1,406 to 1,448 people). However, more growth occurred in other areas of the election district as the total population in Election District Three grew by 32 percent. This growth was mainly due to housing growth associated with increased employment in government agencies in Leonardtown. Based on St. Mary's County population projections for the year 1995, both Election District Three's and Leonardtown's populations will increase nearly 14 percent (see Table 2).

An analysis of 1980 Census data indicated that 91.7 percent of the population in Leonardtown was white, 8.1 percent was black and 0.2 percent was classified as other. For Election District Three as a whole, 84.2 percent was white, 14.6 percent was black, 0.3 percent was American Indian, 0.8 percent was of Oriental origin, and 0.1 percent was classified as other. Furthermore, 20 percent of Leonardtown's population was age 60 and older, while 14.8 percent of the total Election District Three population was identified as being age sixty and older.

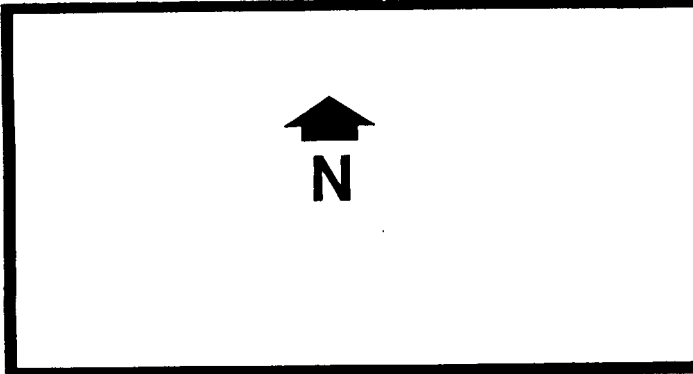
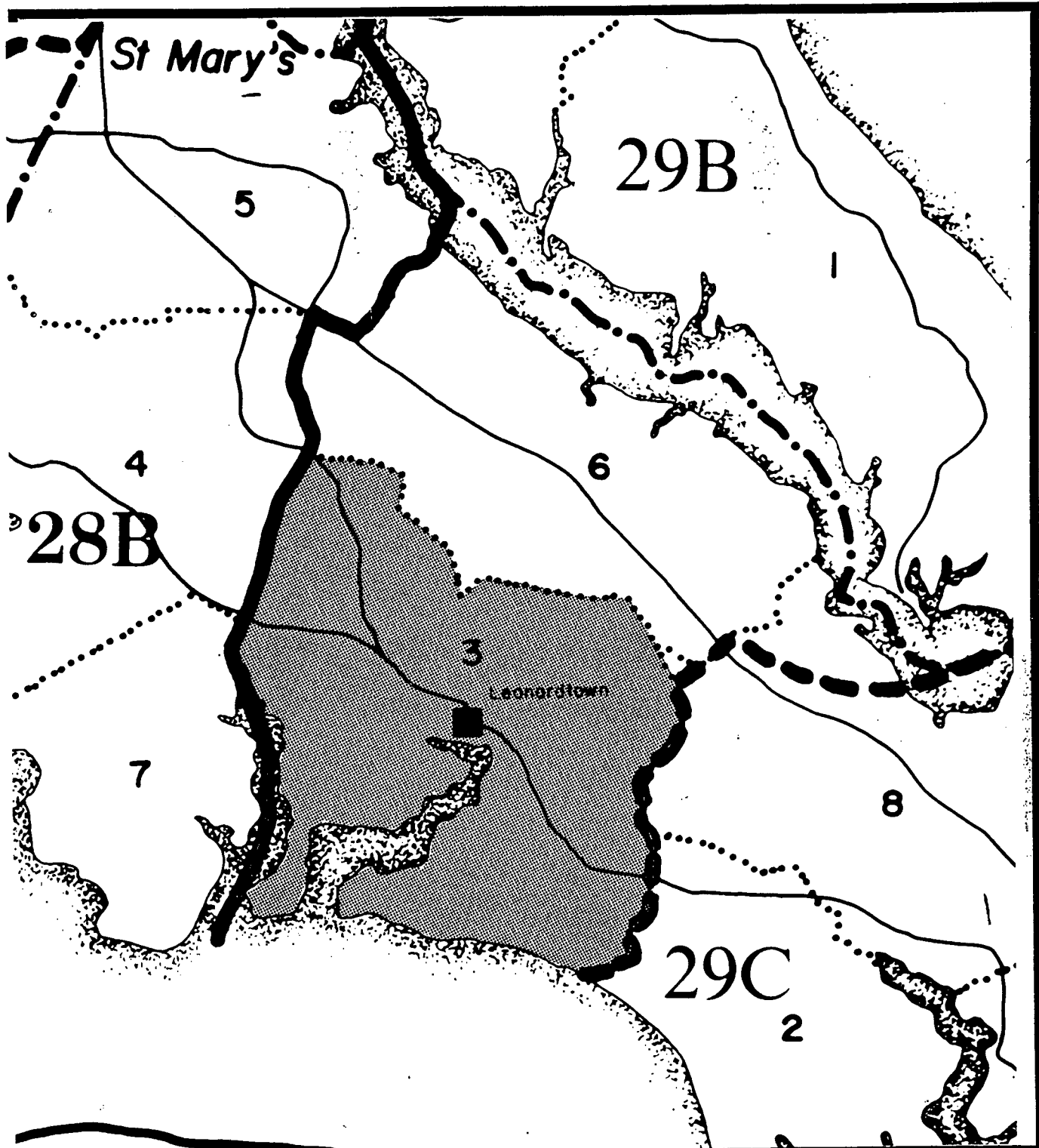
b. Community Facilities and Services

A wide range of community facilities are provided to Leonardtown area residents, since most countywide facilities are located in the town (see Figure 4).

TABLE 2
Population Characteristics

	<u>1970</u>	<u>1970-1980 % Change</u>	<u>1980</u>	<u>1980-1995 Projected % Change</u>	<u>Projected 1995</u>
Leonardtwn	1,406	3.0	1,448	13.8	1,648
Election District 3	5,811	32.0	7,671	13.8	8,731
St. Mary's County	47,388	26.4	59,895	21.5	72,750

Source: U.S. Bureau of the Census, 1980. Census of Population and Housing.
Washington, D.C.



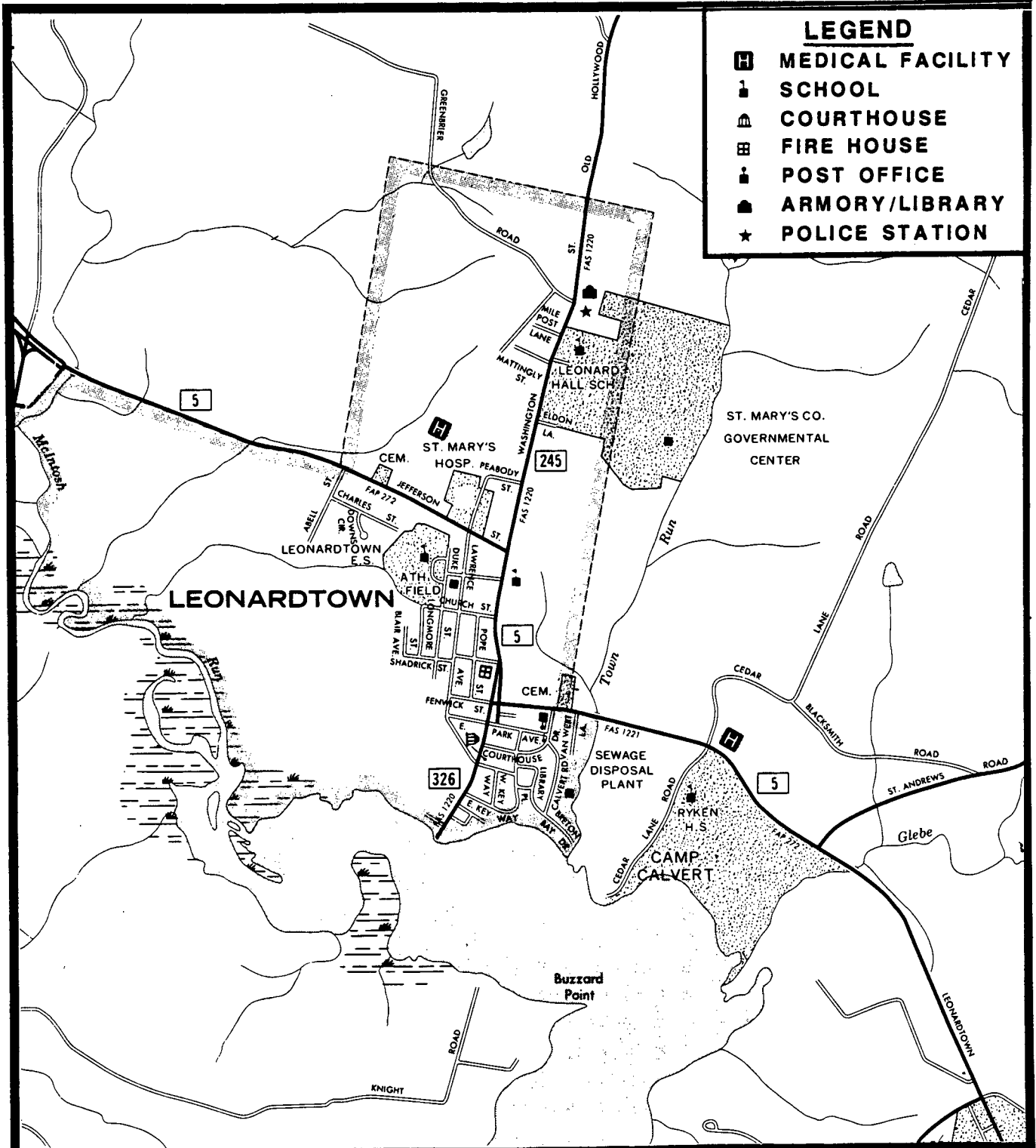
MARYLAND ROUTE 5
LEONARDTOWN BYPASS

ELECTION DISTRICTS

NOT TO SCALE

FIGURE 3

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Situated in the study area are the following services and facilities:

Schools

- Leonardtwn Elementary
- Leonardtwn Middle
- Leonardtwn High
- Ryken High
- Leonard Hall Military Academy
- Father Andrew White Elementary

Churches

- St. Peter's
- St. Paul's United Methodist
- St. Aloysius

Fire protection is provided by the Leonardtown Volunteer Fire Department and police protection by the Maryland State Police, St. Mary's County detachment, and St. Mary's County Sheriff's Department.

As the county seat, Leonardtown contains the District Court, post office, governmental agencies and offices, National Guard, and the main county library. St. Mary's Hospital, the only county hospital, is located in the study area.

A small park and recreation area exists in conjunction with the Leonardtown Elementary School.

Leonardtwn provides municipal water and sewage facilities to area residents.

2. Economic Environment

Since 1970, St. Mary's County has had the lowest percentage of unemployment in the Tri-County Region. This is directly associated with the Naval Air Test Center located in Lexington Park, and government services associated with the county seat in Leonardtown. Over 70 percent of the total income in St. Mary's County is generated by the government sector.

Leonardtwn's economy is broad based, containing a wide variety of employment centers. Because agriculture and fisheries have declined, the county government

is presently the single most important employer in Leonardtown. Other primary areas of employment are retail trade, educational services, and construction.

St. Mary's County Hospital has attracted medical and medical-related employees. Also, there is a wide variety of retail establishments primarily in the General Business District which provide employment as well as goods and services. These include clothing shops, restaurants, a bank, and other commercial establishments.

The median household income in 1979 for Leonardtown was \$17,298, Election District Three was \$17,692, and St. Mary's County was \$11,975.

3. Land Use

a. Existing

The study area consists of a mixture of land uses (see Figure 5). Within Leonardtown's corporate limits, land use is primarily commercial, governmental, and low to medium density residential. Most commercial and governmental development is situated in the General Business District, with much of the housing confined to the northwest area of the General Business District consisting of older single family dwellings. Multiple family uses are few, limited to two complexes near the General Business District and some apartments over commercial uses in the Business District.








Located in the northern area of the town are institutional uses such as the county hospital, several churches, and schools. Undeveloped wooded areas, low density residential, educational, and agricultural land uses predominate outside the corporate limits.

b. Future (see Figure 6)

The Leonardtown Master Plan (1973) is built on a set of guidelines compatible with the overall St. Mary's County Comprehensive Land Use Plan (1978). The



LEGEND

-  CULTIVATED/OPEN SPACE
-  COMMERCIAL
-  SINGLE FAMILY RESIDENTIAL
-  MULTI-FAMILY RESIDENTIAL
-  DENSE WOODED
-  LIGHT WOODED
-  GOVERNMENTAL/INSTITUTIONAL

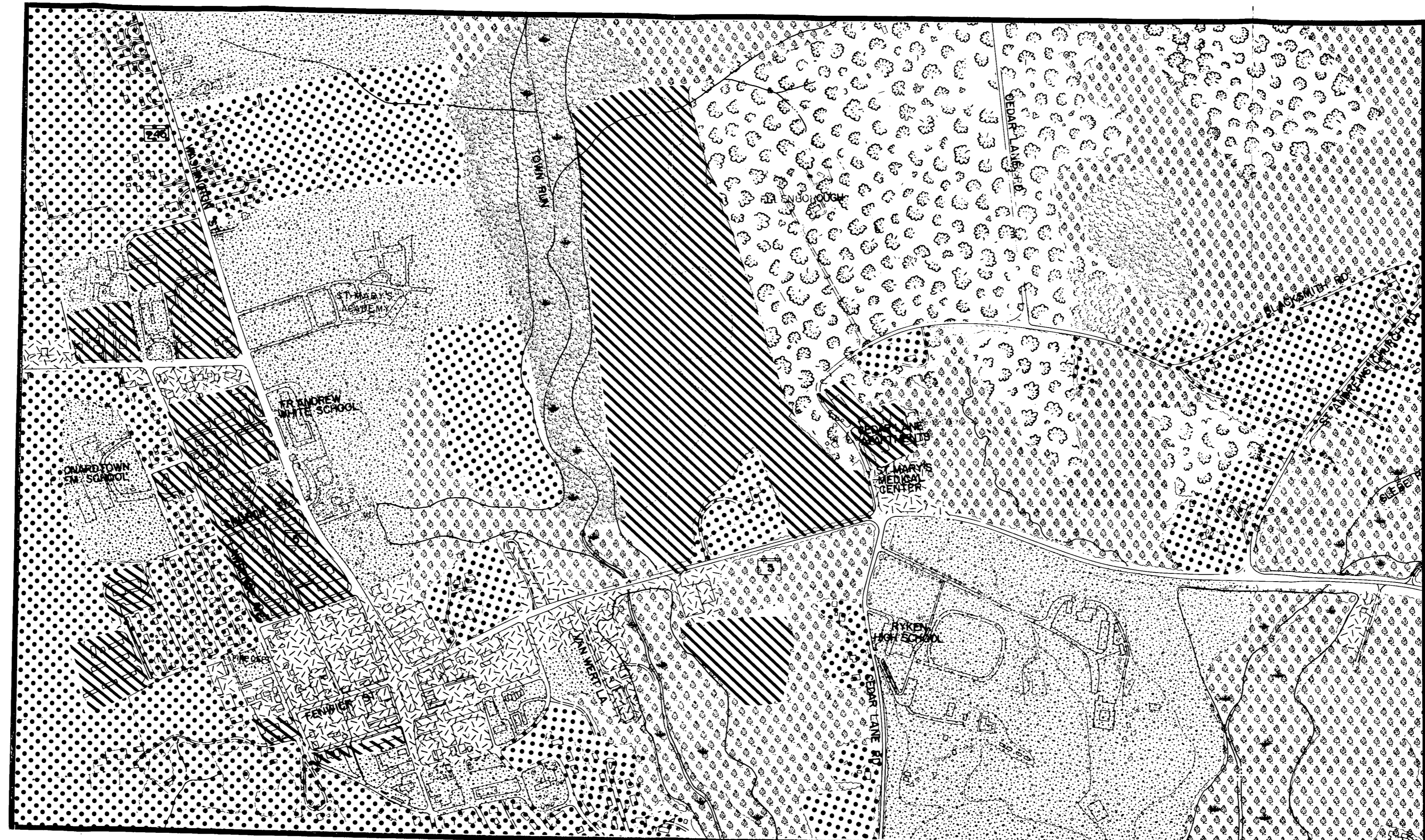


MARYLAND ROUTE 5
LEONARDTOWN BYPASS








EXISTING LAND USE

SCALE: 1"=500'

FIGURE 5



LEGEND

-  CULTIVATED/OPEN SPACE
-  COMMERCIAL
-  SINGLE FAMILY RESIDENTIAL
-  MULTI-FAMILY RESIDENTIAL
-  DENSE WOODED
-  LIGHT WOODED
-  GOVERNMENTAL/INSTITUTIONAL

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MARYLAND ROUTE 5
LEONARDTOWN BYPASS

FUTURE LAND USE

SCALE: 1"=500'

FIGURE 6

county plan identifies Leonardtown as the government center in the county and as one of its major growth centers.

The development of the General Business District is the core of the Leonardtown Master Plan and St. Mary's Comprehensive Land Use Plan. Its intention is to make the General Business District a center which functions effectively to meet the needs of a growing population.

The plan directs the development of Leonardtown in four phases. Overall, it emphasizes a strong business and government area including new sites for county governmental services while preserving existing amenities and buildings. A Maryland Route 5 bypass would eliminate through traffic in the General Business District and encourage the development of the General Business District as a pedestrian oriented green area with an internal loop road and off-street parking. In the final phase of development, stores along the town square could become a mall with a covered walkway and crosswalks.

Commercial development is also designated for the western edge of town along Maryland Route 5 to serve through traffic.

The Land Use Plan proposes high density residential development in town, generally west of Washington Street, and south of the hospital to Shadrick Street. Low density residential development would be encouraged south and east of the Court House and north of St. Mary's Hospital. In addition, single family detached dwellings, townhouses, and garden apartments are designated east of Leonardtown's corporate limits in the central portion of the study area.

4. Historic and Archeological Resources

The project area has been reconnoitered for both historic and archeological resources. Only one possible National Register Eligible historic site, Ellenborough (STMA 68), is located within the area of possible environmental

impacts (see Maryland Historical Trust letter in Section V dated September 14, 1979). The historical significance of this site is based on the site's architecture and its historical associations. The other possible National Register Eligible historic sites, Buena Vista (STMA 52) and Wentworth Howe, are outside the project area.

The Maryland Geological Survey, in its September 24, 1985, letter (see Letter in Section V) reports that one archeological site was found but the site is not considered significant and no further archeological study is warranted.

5. Natural Environment

a. Topography and Physiography

The study area lies on the western shore of the Coastal Plain physiographic province. Terrain in the study area is characterized by gently rolling hills with steeper slopes occurring in the vicinity of Town Run. Elevations range from approximately 10 feet at Town Run to approximately 120 feet on the upland plateau above the east bank of Town Run. Slopes are generally no greater than 15 percent but may be as much as 45 percent in the vicinity of Town Run.

b. Geology and Groundwater

The study area is underlain by few distinct formations or deposits formed during the Tertiary and Quaternary periods of the Cenozoic geologic era.

1. Choptank Formation

The Choptank Formation, a member of the Chesapeake Group, consists of interbedded brown to yellow very fine-grained to fine-grained sand and gray to dark bluish-green argillaceous silt; locally indurated to calcareous sandstone; prominent shell beds; thickness 0 to 50 feet.

2. St. Mary's Formation

The St. Mary's Formation, also a member of the Chesapeake Group, consists of

greenish-blue to yellowish-gray sandy clay and fine-grained argillaceous sand; thickness 0 to 80 feet.

3. Upland Deposits - Western Shore

The Upland Deposits consist of gravel and sand, commonly orange-brown, locally limonite-cemented; minor silt; and red, white, or gray clay.

4. Lowland Deposits

The Lowland Deposits consists of gravel, sand, silt, and clay; medium- to coarse-grained sand and gravel; cobbles and boulders near base; commonly contains reworked Eocene glauconite; varicolored silts and clays; brown to dark gray lignitic silty clay; thickness 0 to 150 feet.

The Coastal Plain sediments in St. Mary's County are 2,000 to 3,000 feet thick and contain many water bearing formations; however, only the Upper Cretaceous, Eocene, and Pleistocene deposits are utilized as sources of groundwater.

The Leonardtown area draws most of its water from the Aquia greensand aquifer of the Eocene deposits. In the central part of St. Mary's County, this aquifer yields soft sodium bicarbonate water.

The City of Leonardtown draws water for municipal purposes from three wells that have averaged 232,400 gallons per day over the last 10 years.

c. Soils

The U.S. Department of Agriculture, Soil Conservation Service, Soil Survey has identified the following soil types within the study area:

Beltsville-Croom-Sassafras Association - Composed of level to strongly sloping, moderately well drained and well drained, silty and loamy soils, some of which have a fragipan or compact gravelly subsoil; on uplands. (A fragipan is a loamy, brittle subsurface horizon low in porosity and content of organic

matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.)

The Beltsville-Croom-Sassafras association makes up approximately 27 percent of the county and accounts for the majority of the soils in the study area. According to the St. Mary's County Soil Survey, published by the Soil Conservation Service, "Nearly half of these soils are either severely eroded or are subject to severe hazard of erosion." The soils in this association have the following general characteristics:

- Beltsville - Highly erodible
- Croom - Moderately erodible
- Sassafras - No problem

Matapeake-Mattapex-Sassafras Association - Composed of nearly level to strongly sloping, well drained and moderately well drained, silty and loamy soils generally underlain by a sandy substratum; on uplands and terraces.

The Matapeake-Mattapex-Sassafras association accounts for a small portion of the study area soils located near the eastern tie-in point near St. Andrews Church Road. There is no mention of any erosion problems for the soils in this association, according to the Soil Conservation Service, St. Mary's County Soil Survey. As such, these soils are suitable for construction. The soils in this association have the following characteristics:

- Matapeake - Moderately erodible
- Mattapex - Moderately erodible
- Sassafras - No problem

Prime Farmland - A small portion of the study area has been classified by the U.S. Department of Agriculture, Soil Conservation Service as Prime Farmland

(see Figure 7). There is no indication of any unique farmland within the study area.

d. Surface Water (see Alternates Mapping)

There are two surface waterways within the study area: Town Run and Glebe Run. The largest water course is Town Run. This stream is located in the heavily wooded valley described earlier. An unnamed tributary of Town Run flows across the St. Mary's Academy property. An intermittent stream is located along Maryland Route 5 in the eastern portion of the study area. This unnamed stream is a tributary of Glebe Run. All these streams are tributaries of Breton Bay.

The Maryland Department of Health and Mental Hygiene has classified all surface waters of the state into four categories according to desired use. All waters of the state are Class I, with additional protection provided by higher classifications. All surface waters in the study area are designated Class I except for Breton Bay, which is Class II - Shelfish Harvesting Waters.

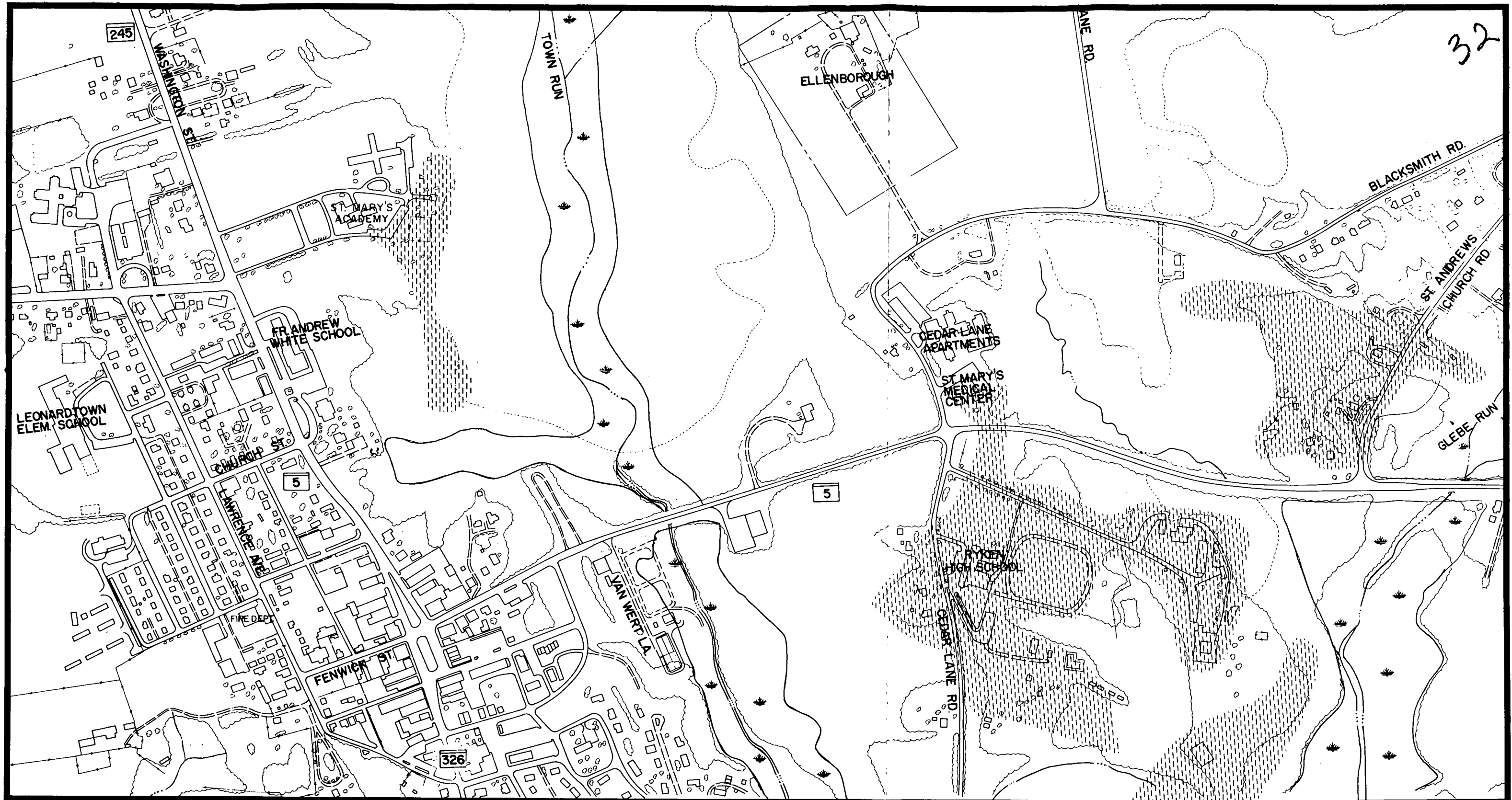
e. Floodplains

Two areas of 100-year floodplain are located within the study area. One is adjacent to Town Run and the other is located in the vicinity of Glebe Run and Maryland Route 5. The floodplain limits, shown on the Alternates Mapping (Figures 11 and 12) are based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs).

f. Ecology

1. Terrestrial Habitat

The Maryland Route 5 study area consists of two major terrestrial habitat types. Woodland or forested areas can be identified and subdivided into the vegetation associations listed below:



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MARYLAND ROUTE 5
LEONARDTOWN BYPASS
PRIME FARMLAND SOILS MAP
SCALE: 1"=500'
FIGURE 7

Willow Oak-Loblolly Pine Association - This association is characterized by the presence of loblolly pine and willow oak. Other common species include red maple, sweet gum, black gum, American holly, white oak, and sassafras. Major shrubs include greenbrier and Virginia creeper. Most woodland or forested areas in the study area belong to this association, which is found extensively throughout the Coastal Plain.

River Birch - Sycamore Association - Besides river birch and/or sycamore, representative species include slippery elm, green ash, spicebush, and poison ivy. This association is found mainly in the Coastal Plain province along most of the higher order of streams.

The abandoned field-shrub vegetation community is composed of herbaceous and woody species common in this stage of succession. Grasses, legumes, and other herbaceous species are expected to occur but were not readily identifiable due to the season during which ecological investigations were carried out. Some species of woody plants that have invaded the area include: Japanese honeysuckle, sweet gum, blackberry, Virginia pine, pitch pine, greenbrier, and trumpetvine (Campsis radicans). The pine species form dense thickets in some locations since they are able to invade abandoned areas more quickly than many other species.

2. Aquatic Habitat (see Alternates Mapping)

Wetland areas potentially affected by the proposed project were investigated using National Wetland Inventory Maps (U.S. Fish and Wildlife).

Palustrine, forested, non-tidal wetlands were identified along the length of Town Run. Dominant species include red maple, American elm, ashes, black gum, tupelo gum, swamp white oak, overcup oak, and basket oak.

Palustrine, scrub-shrub/emergent tidal and non-tidal wetlands are located south of Maryland Route 5 in the vicinity of Glebe Run.

The area was very wet underfoot during ecological field investigations. Trees up to 40 feet in height were scattered, leaving smaller trees, shrubs, and vines to dominate the area. Growth was dense and difficult to penetrate. Tree species observed include sycamore, red maple, and willow (Salix sp.). Alder was an abundant shrub with elder (Sambucus sp.) and blackberry. Common woody vines found here were Japanese honeysuckle, wild grape, and greenbrier. One of the more open areas of the wetland contained a stand of cattail (Typha sp.).

g. Endangered Species

Coordination with the U.S. Fish and Wildlife Service and the Maryland Department of Natural Resources indicates that no known federally-listed threatened or endangered species have been recorded in the study area (see Correspondence Section).

The Dwarf Wedge Mussel (Alasmidonta heterodon), a state-rare freshwater clam, is found in McIntosh Run, the next tributary to the west. A. heterodon is presently listed as a Category II candidate under consideration for listing as a Threatened or Endangered Species by the U.S. Fish and Wildlife Service.

6. Air Quality

The Maryland Route 5 project is within the Southern Maryland Intrastate Air Quality Control Region. The Maryland State Implementation Plan does not require any transportation control measures for this region. This region's Environmental Protection Agency (EPA) attainment status designation is "cannot be classified or better than the national standards."

A detailed microscale analysis has been performed to determine the carbon monoxide (CO) impact of the proposed project and is described in further detail in Section IV. G.

7. Existing Noise Conditions

Seven noise sensitive areas (NSAs) have been identified in the Maryland Route 5 study area. Descriptions of the noise sensitive areas are provided in Table 3. The location of the NSAs are shown on Figures 11 and 12. A copy of the technical analysis report is available at the State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

Highway traffic noise is usually measured on the "A" weighted decibel scale "dBA", which is the scale that has a frequency range closest to that of the human ear. In order to give a sense of perspective, a quiet rural night would register about 25 dBA, a quiet suburban night would register about 60 dBA, and a very noisy urban daytime about 80 dBA. Under typical field conditions, noise level changes of 2-3 dBA can barely be detected, with a 5 dBA change readily noticeable. A 10 dBA increase is judged by most people as a doubling of sound loudness. (This information is presented in the "Fundamentals and Abatement of Highway Traffic Noise," by Bolt, Beranek & Newman, Inc., for FHWA, 1980).

The Federal Highway Administration has established, through Federal-Aid Highway Program Manual (FHPM) 7-7-3, noise abatement criteria for various land uses (see Table 4).

The noise levels are expressed in terms of a, L_{eq} noise level or equivalent level on a hourly basis. The L_{eq} noise level is the energy averaged level for a given period of time.

All ambient and predicted levels in this report are L_{eq} exterior levels unless otherwise noted.

Measurement of ambient noise levels is intended to establish the basis for impact analysis. The ambient noise level as recorded represents a generalized view of present noise levels. Variations with time of total traffic volume, truck traffic volumes, speed, etc., may cause fluctuations in ambient noise

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TABLE 3
Noise Sensitive Areas

<u>Noise Sensitive Area</u>	<u>Activity Category</u>	<u>Description</u>
1	B	Father White School. Brick, air conditioned, located on existing Maryland Route 5.
2	B	St. Paul's United Methodist Church located on existing Maryland Route 5.
3	B	Edge of right-of-way site (Ellenborough Historic Site).
4	B	Cedar Lane apartments.
5	B	One (1), one-story, single family brick residence located on existing Maryland Route 5.
6	B	Ryken High School, Brother's House.
7	B	One (1) one and one-half story, single family frame residence located on existing Maryland Route 5.

TABLE 4

Noise Abatement Criteria and Land Use Relationships
Specified in FHPM 7-7-3

<u>Activity Category</u>	<u>Leq (h)</u>	<u>L10 (h)</u>	<u>Description of Activity Category</u>
A	57 (Exterior)	60 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	70 (Exterior)	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	75 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	--	Undeveloped lands.
E	52 (Interior)	55 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

levels of several decibels. However, for the purpose of impact assessment, these fluctuations are not sufficient to significantly affect the assessment.

It was determined that for most of the noise sensitive areas, the most typical noise conditions occur during the non-rush hour period (9:00 a.m. - 4:00 p.m.). During this time, the highest levels are experienced for the greatest length of time.

The results of the ambient measurements are included in Table 5 along with the predicted noise levels; see also on Figures 11 and 12 for NSA receptor locations.

TABLE 5
Project Noise Levels

<u>NSA</u>	<u>Description</u>	<u>Ambient Leq</u>	<u>Design Year (2015) Leq</u>		
			<u>No-Build</u>	<u>Alternate 2</u>	<u>Alternate 3</u>
1	School	58	63	60	59
2	Church	59	66	NA	NA
3	Residential	44	NA	64	NA
4	Residential	45	50	55	55
5	Edge of right-of- way site	48	55	NA	57
6	School	48	55	54	57
7	Residential	59	60	62	62

II NEED FOR THE PROJECT

II. NEED FOR THE PROJECT

A. Purpose

The purpose of the study is to evaluate feasible alternatives for the relocation of Maryland Route 5 at Leonardtown, in St. Mary's County. The relocation (bypass) will serve to improve traffic circulation and operations, relieve congestion, and provide increased capacity for expected growth in the town and the surrounding area.

Currently, to proceed through Leonardtown on Maryland Route 5 a "Z" movement is required. This consists of a right-turn at the Maryland Route 5/Maryland Route 245 intersection and then a left-turn at the Maryland Route 5/Maryland Route 326 intersection in the heart of the Leonardtown business district.

The major problems with existing Maryland Route 5 are delays and congestion occurring within the Leonardtown business district. These result from the mix of local and through trips, side friction from on-street parking serving the considerable commercial development along both sides of Maryland Route 5 in-town, and friction resulting from trips to and from residential areas bordering Maryland Route 5.

In addition, traffic volumes have increased 26 percent in the last 6 years and are expected to increase further as the town and surrounding areas continue to experience residential and commercial growth. Leonardtown, as the county seat of government for St. Mary's County, serves as a traffic attractor and will receive more traffic as the county's population grows and development increases.

The proposed bypass would improve in-town traffic circulation and relieve congestion, thus resulting in improved operating conditions (free-flow) and fewer delays. It would also serve to separate local and through purpose trips, thereby diverting almost all through trips destined for locations outside of the

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area such as St. Mary's City and College, Point Lookout, and St. George Island. The separation of through trips from in-town traffic would alleviate the side friction from on-street parking and residential access as well as improving access to the county seat. In addition, the bypass will serve to increase the capacity of the town's roadway network, thus providing for the expected residential and commercial growth.

B. Project History

Maryland Route 5 serves as a minor arterial highway on Maryland's Secondary Highway System and is on the Federal Aid Primary System. Maryland Route 5 Relocated, the Leonardtown Bypass, first appeared in the 1975-1979 Secondary Highway Improvement Program as a four-lane divided highway improvement. The project continued to be included in the Improvement Program up through the 1980-1985 publication.

The project was then deleted from the 1981-1986 Consolidated Transportation Program (CTP) and consideration was given to transportation systems management recommendations. In 1984, St. Mary's County elected officials indicated that the Leonardtown Bypass was St. Mary's County's top highway priority. A study to consider a new highway from Maryland Route 4 to Maryland Route 245 at Maryland Route 5 was listed in the Secondary Development and Evaluation portion of the 1985-1990 CTP with funding programmed for Planning and Engineering. The Leonardtown Bypass, from Maryland Route 4 to Maryland Route 245 at Maryland Route 5, currently appears in the Secondary Construction Program of the Draft 1986-1991 CTP with funding available for right-of-way and construction.

Maryland Route 5 Relocated, the Leonardtown Bypass, was first listed in the 1971-1990 Twenty Year Highway Needs Study and has appeared in each document

since that time. It is presently included in the 1984 Highway Needs Inventory from Maryland Route 4 to Maryland Route 245 as a two-lane improvement.

C. Existing Roadway

The existing Maryland Route 5 in Leonardtown consists of three major roadways: Jefferson Street, Washington Street, and Fenwick Street/Leonardtown/Point Lookout Road.

Jefferson Street consists of a 50-foot undivided four-lane curbed section from Maryland Route 943 (outside project limits) to Maryland Route 245. The posted speed limit is 30 mph.

Washington Street is a 50-foot undivided four-lane curbed section from Jefferson Street to 350 feet north of Maryland Route 326. From this point, Washington Street expands to a six-lane divided section which includes parking lanes. The posted speed limit is 25 mph.

Fenwick/Leonardtown/Point Lookout Road is a 40-foot undivided two-lane curbed section from Washington Street to St. Aloysius Cemetery. East of the cemetery, the existing roadway consists of two 12-foot lanes with 12-foot shoulders. The posted speed limit is 25 mph from Washington Street to 0.1 mile east and is 40 mph to 0.18 mile east of Cedar Lane Road. Easterly beyond the project limits, the posted speed is 50 mph.

D. Traffic Conditions

Traffic circulation and flow in downtown Leonardtown is adversely affected by the mix of local and through purpose trips and on-street parking. In addition, traffic volumes have increased 26 percent in the last 6 years and are expected to increase further as planned growth continues, thereby resulting in increased delays and congestion.

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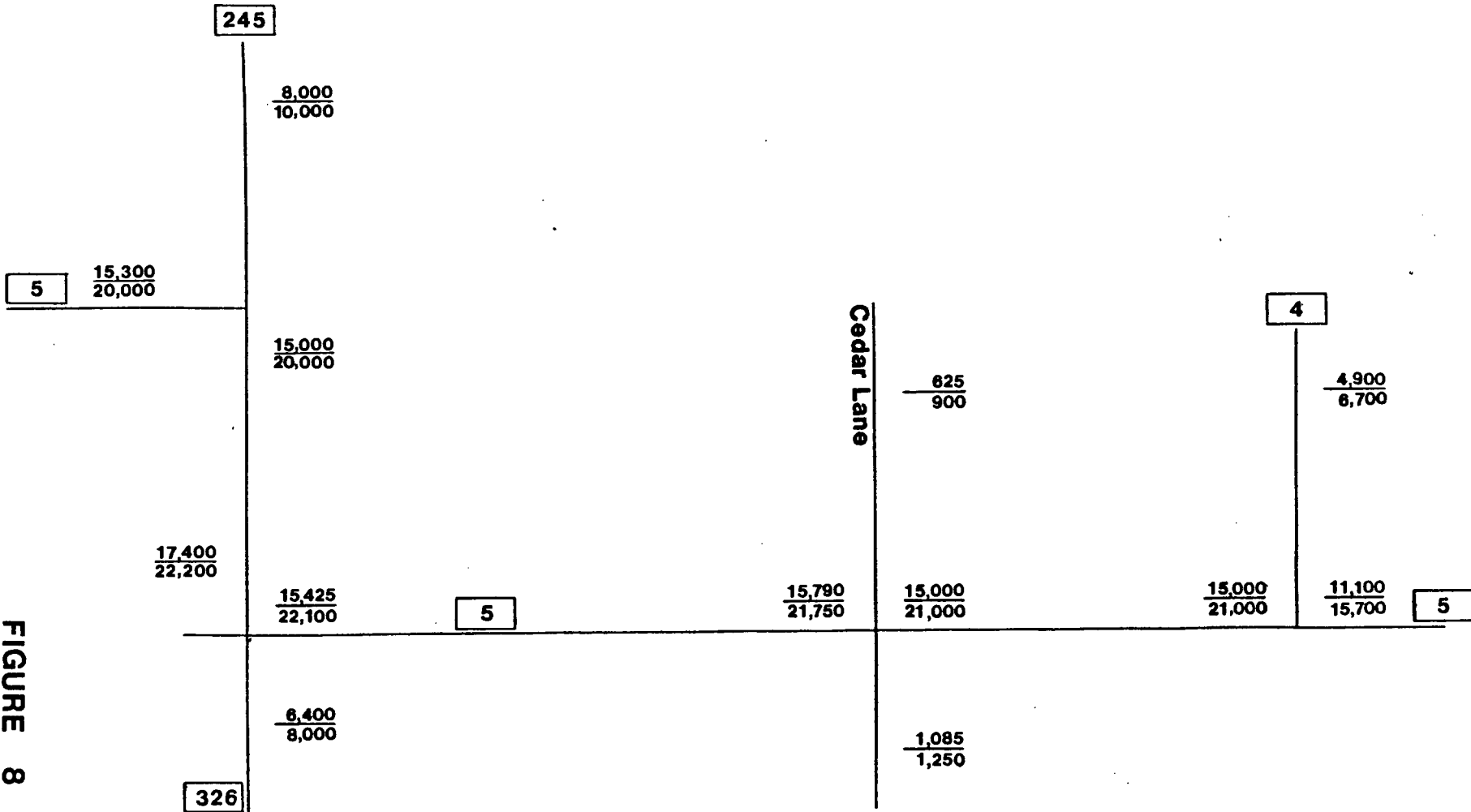
Average Daily Traffic (ADT) on Maryland Route 5 within Leonardtown (Leonardtown/Point Lookout Road) was 12,600 vehicles per day in 1985 with an estimated ADT increase of 75 percent or approximately 9,500 vehicles by the design year 2015. Figures 8, 9A, and 9B show the average daily traffic volumes for the No-Build and build alternates for the completion year (1995) and the design year 2015.

Traffic service assessments estimate that the bypass would handle approximately 50 percent of the projected traffic volumes. This would decrease in-town traffic volumes by 2015 to less than the 1985 traffic volumes.

Quality of traffic flow along a highway is measured in terms of level of service (LOS). This measure is dependent upon highway geometry and traffic characteristics and ranges from LOS "A" (Best) to LOS "C" (Minimum Desirable), to LOS "E" (Capacity), and LOS "F" (Worst or Forced Flow). An analysis of traffic operations (see Table 6) on Maryland Route 5 indicates that in 1985 the Maryland Route 5/Maryland Route 326 operated at LOS "E" during the evening (P.M.) peak hour traffic flow. In the design year 2015 with the No-Build alternate, the Maryland Route 5/Maryland Route 326 intersection would operate at LOS "F" during the A.M. and P.M. peak hours. If the bypass is not constructed, traffic flow in the center of the Leonardtown business district would be severely congested by the year 2015.

The construction of the bypass with either build alternate would serve to alleviate in-town congestion. The Maryland Route 5/Maryland Route 326 intersection would operate at LOS "B" during the A.M. peak hour and LOS "C" during the P.M. peak hour.

AVERAGE DAILY TRAFFIC NO BUILD ALTERNATE



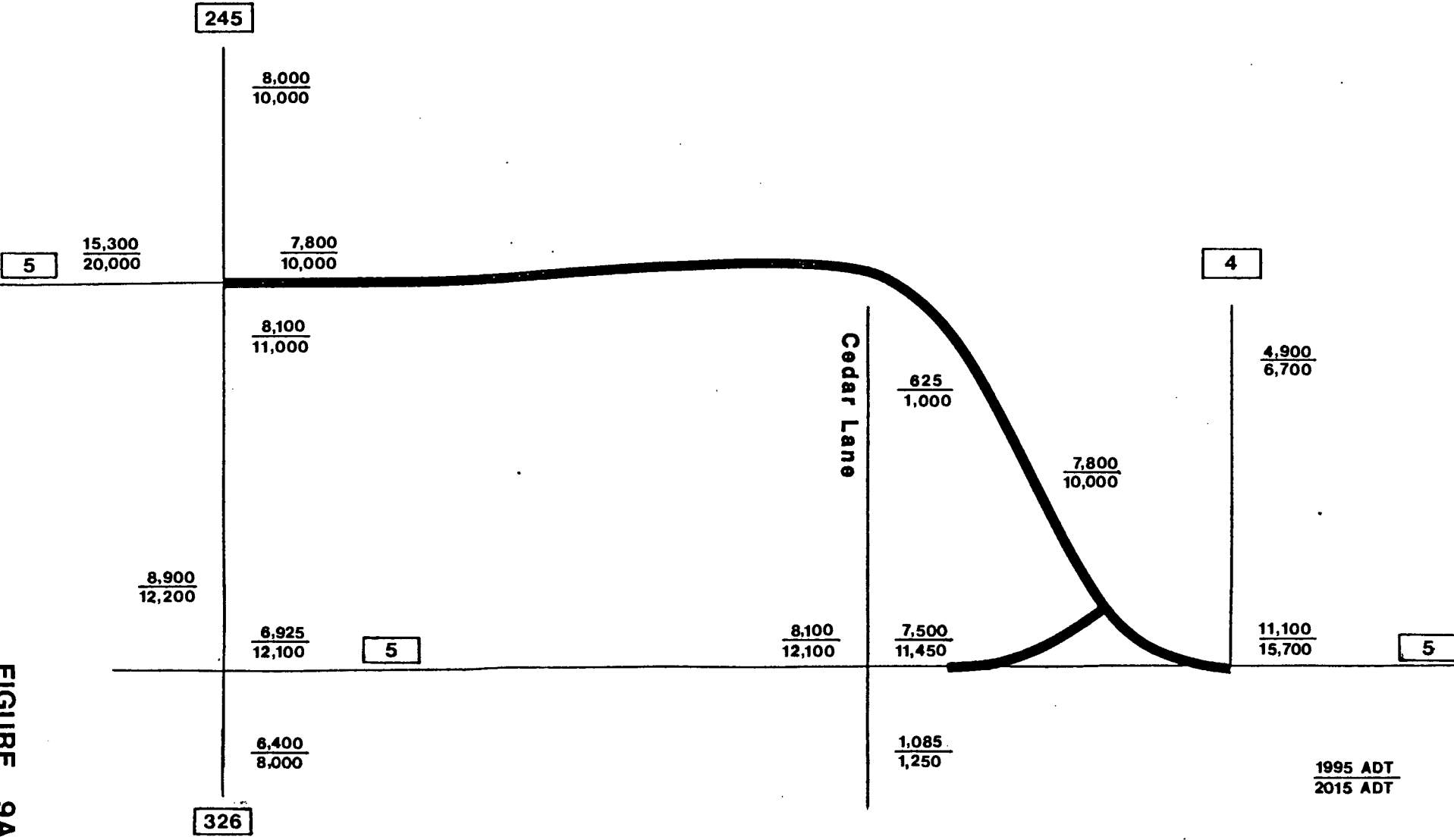
II-5

FIGURE 8

1995 ADT
2015 ADT

CS

AVERAGE DAILY TRAFFIC BUILD ALTERNATE 2



11-6

FIGURE 9A

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TABLE 6

Level of Service (LOS) Analysis - A.M./P.M. Peak Hours

Location	1985	1995		2015	
	Existing AM/PM Peak	No-Build AM/PM Peak	Build AM/PM Peak	No-Build AM/PM Peak	Build AM/PM Peak
MD 5/MD 245	B/B	C/C	C/C	D/D	D/D
MD 5/MD 326	C/E	D/F	A/B	F/F	B/C
MD 5/MD 4	B/B	B/B	B/B	C/B	B/B

E. Accident Statistics

Maryland Route 5, from the proposed bypass location to Maryland Route 4 (St. Andrews Church Road), experienced 44 reported accidents during the study period 1981 through 1983, resulting in an accident rate of 258 accidents per one hundred million vehicle miles (acc/100 MVM) of travel. This study period rate is lower than the statewide average accident rate (363 acc/100 MVM) for similar design highways now under state maintenance. The cost to the motoring and general public as a result of these accidents is approximately \$2,989,000/100 MVM of travel. These accidents are listed below by year and severity.

<u>Severity</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>Total</u>
Fatal Accidents	0	1	0	1
Persons Killed	0	1	0	1
Injury Accidents	11	7	5	23
Persons Injured	18	11	14	43
Property Damage Accidents	8	8	4	20
Total Accidents	19	16	9	44

The study area experienced four pedestrian accidents which exceeded the statewide average rate to a significant degree during the study period and accounted for the fatality listed above. Fixed Object Collisions also exceeded the statewide rate, although they are not significantly higher for this type of highway.

Under the No-Build alternate, based on traffic forecasts and assuming the current accident rate would be valid in 2015, it is expected that the number of accidents for the study area would increase by approximately 50 percent above

the average number that occurred during the study period. Comparatively, under a build alternate in 2015, the projected total number of accidents for both the bypass and existing road would be 30 percent less than for a No-Build situation.

The proposed bypass would be expected to experience an accident rate of approximately 144 acc/100 MVM. The projected accident rate for existing Maryland Route 5 combined with the bypass is expected to produce an accident rate of approximately 178 acc/100 MVM for the entire corridor in 2015. Accident costs, currently at \$3 million/100 MVM, would decrease to approximately \$700,000/100 MVM in 2015 and would result in an accident cost savings of approximately \$2.3 million/100 MVM to the motoring and general public.

In summary, the build alternates for this project would significantly reduce the projected accident increases forecasted for the design year. In particular, projected increases in collision types normally associated with congestion and increased traffic volume (i.e. angle, left turn, rear end) would be reduced or avoided with either of the two build alternates.

F. Associated Improvements

Recent improvements completed in the Leonardtown area include the resurfacing of Maryland Route 4 from Maryland Route 5 east to Indian Bridge Road (completed September 1985) and the resurfacing of Maryland Route 5 from Maryland Route 246 south to Maryland Route 235 (completed July 1984).

The 1986-1987 Special Projects Program contained in the 1986-1991 Consolidated Transportation Program and the State Highway Administration's monthly advertising schedule include resurfacing and safety improvements on Maryland Route 5 from Courthouse Drive in Leonardtown to Maryland Route 245. This proposed improvement is scheduled to be advertised in April 1986. The improvement will include restriping and resurfacing for two lanes on both

roadways. Parking will be eliminated along the median of the southbound roadway of Washington Street for a 60 day trial period while parking will continue along the right hand curb lane.

III ALTERNATIVES CONSIDERED

III. ALTERNATES CONSIDERED

A. Alternates Dropped From Consideration

The following preliminary alternate was presented at the Alternates Public Meeting held on June 12, 1985, but was dropped from further consideration by the project team for the reason explained below.

Alternate 1 begins at the intersection of existing Route 5 and Route 245. From this point, relocated Maryland Route 5 would extend easterly through the intersection, proceed just north of the Father Andrew White Elementary School, and pass over Town Run on an alignment similar to Alternate 2. Alternate 1 would then intersect with Cedar Lane Road approximately 500 feet west of the existing Blacksmith Road/Cedar Lane Road intersection. The alignment east of Town Run is north of Alternate 2 at Cedar Lane Road. This alternate then curves in a southerly direction merging with existing Maryland Route 5 and ending just east of Route 4.

This alternate was dropped from consideration because it would impact the Ellenborough historic site.

B. Alternates Retained for Detailed Studies

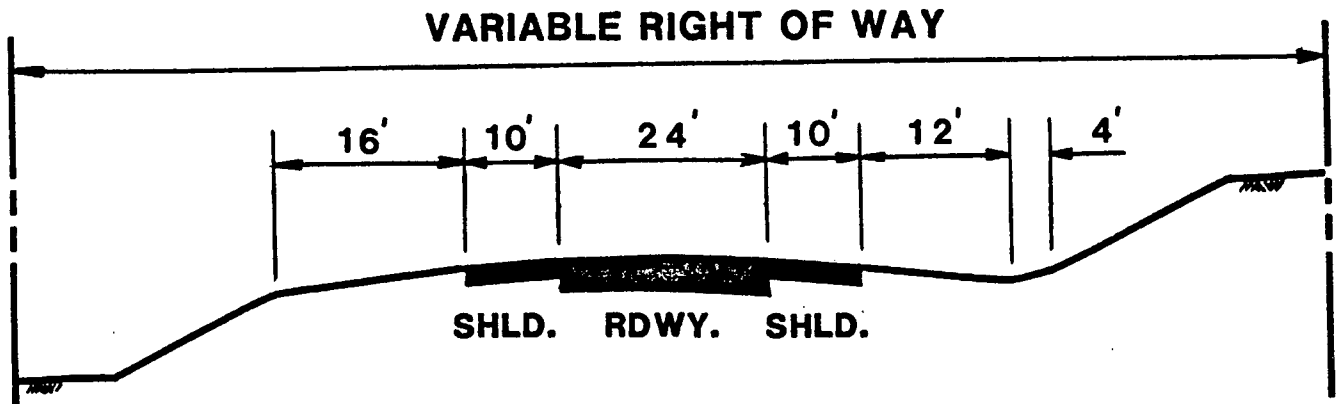
1. No-Build Alternate

Under the No-Build Alternate, there would be no expenditure of funds other than routine maintenance. This alternate would not offer any improvement in traffic operation or capacity. No long range improvements would be realized and the mix of through and local traffic through Leonardtown would continue. The existing Leonardtown street system is not a realistic alternative to accommodate increased traffic volumes.

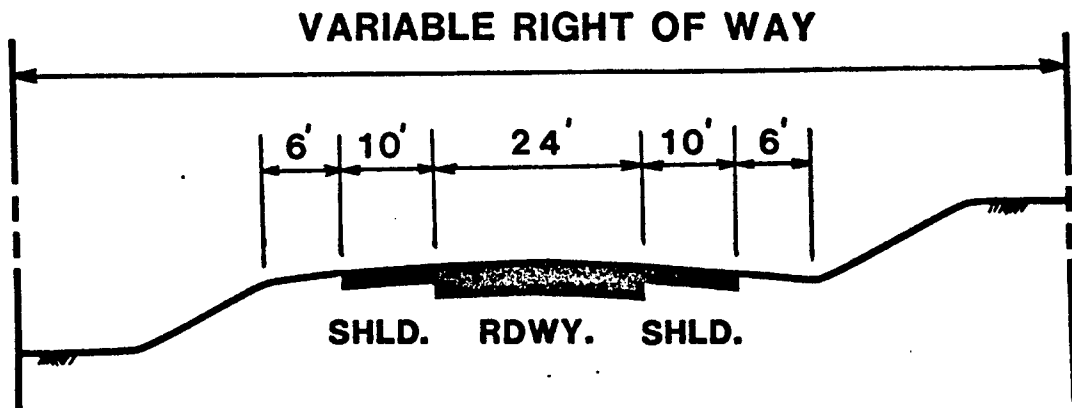
2. Alternate 2 (see Figures 10 and 11)

This alternate proposes the construction of a relocated portion of Maryland Route 5 beginning at the intersection of existing Maryland Route 5 and Maryland

PROPOSED TYPICAL SECTION ⁵³



RELOCATED MD. 5

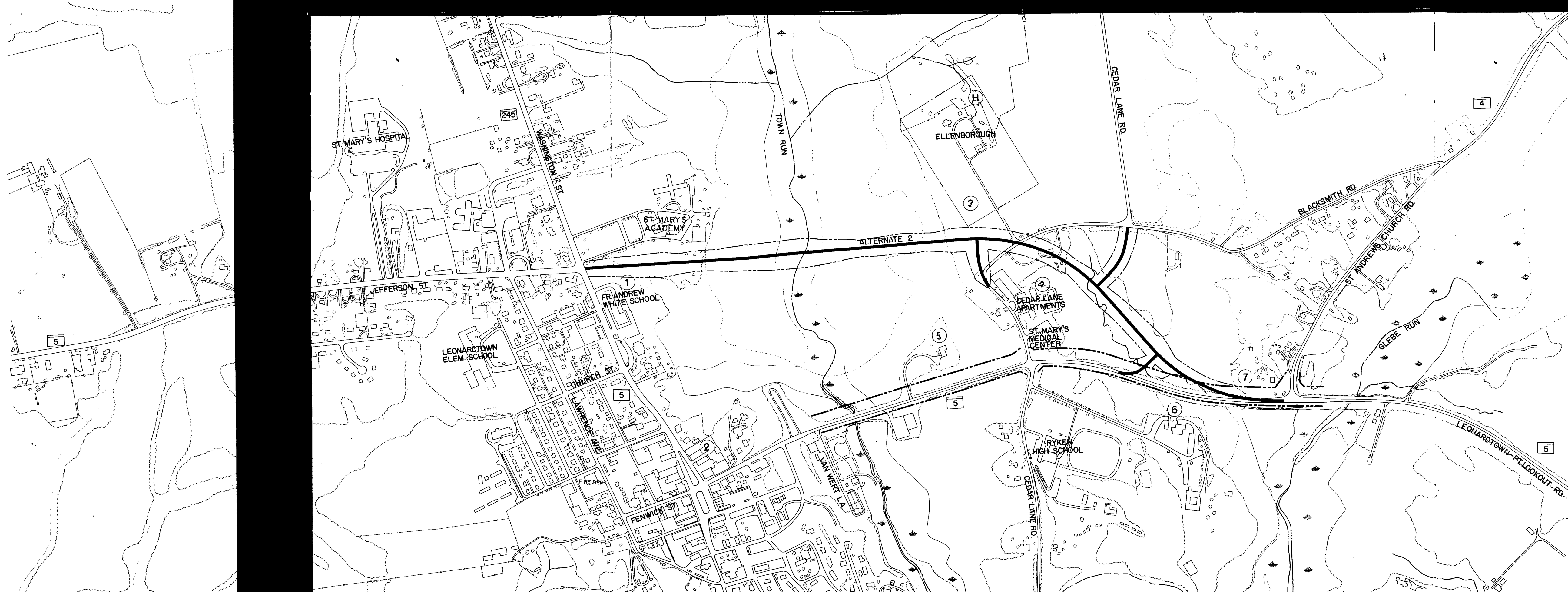


SERVICE ROADS

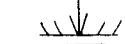
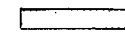





NOT TO SCALE

NOTE:

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



LEGENDS

- WETLANDS 
- FLOODPLAIN 
- AIR + NOISE RECEPTOR SITES 
- HISTORIC SITE 
- HISTORIC BOUNDARY 
- EXISTING RIGHT OF WAY 
- PROPOSE RIGHT OF WA 

MARYLAND ROUTE 5
Leonardtown Bypass

ALTERNATE 2

SCALE: 1" = 500'

FIGURE 11

Route 245 (Washington Street), proceeding easterly just north of the Father Andrew White Elementary School and passing over Town Run. The proposed roadway then passes between the Ellenborough historic site and Cedar Lane and then turns in a southerly direction behind the Cedar Lane Apartments.

A four legged intersection will not be provided at the intersection of Cedar Lane due to the substandard geometrics. Two "T" intersections will provide the required service. One intersection will extend from the existing Cedar Lane in front of the Cedar Lane Apartment parking lot to the proposed roadway. The other intersection will extend south from the existing intersection of Cedar Lane and Blacksmith Road to the proposed roadway.

The proposed roadway will tie in to the existing Maryland Route 5 at the intersection of Maryland Route 5 and Maryland Route 4 (St. Andrews Church Road). A tie-in from existing Maryland Route 5, between the Maryland Route 5/Cedar Lane intersection and the Maryland Route 5/Maryland Route 4 intersection, to the proposed roadway will form a "T" intersection.

The typical section for this alternate consists of a two-lane, 24-foot roadway with two 10-foot shoulders, and 12 feet of safety grading. The typical section of required service roads is a two-lane, 24-foot roadway with two 10-foot shoulders, and 6 feet of safety grading. The horizontal and vertical alignments are consistent with a 50 mph design speed for the mainline and 20 mph design speed for service roads.

The crossing of Town Run by the proposed roadway will be addressed by hydraulic structures.

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The cost of Alternate 2 is:

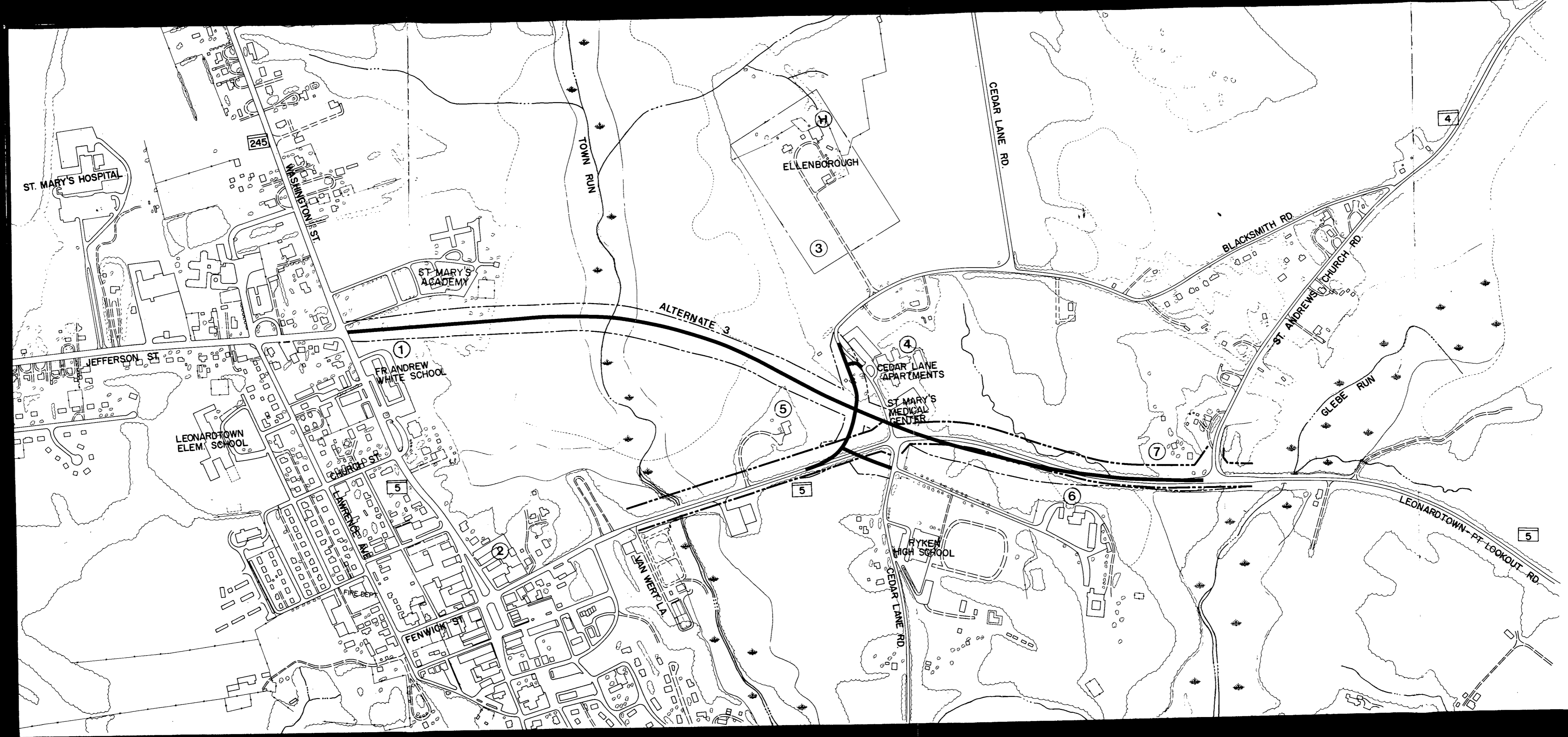
Preliminary Engineering	\$ 214,886
Right-of-Way	735,885
Construction	<u>2,573,080</u>
TOTAL	\$3,523,851

3. Alternate 3 (Preferred) (see Figures 10 and 12)

This alternate is similar to Alternate 2 from the intersection of Maryland Route 5/Maryland Route 245 until entering the Town Run floodplain. The proposed roadway turns south just prior to entering the Town Run floodplain and passes over Town Run. The proposed roadway crosses existing Cedar Lane between the existing intersection of Maryland Route 5/Cedar Lane and St. Mary's Medical Center. The proposed roadway then runs along existing Maryland Route 5 to tie in to the existing intersection of Maryland Route 5/Maryland Route 4.

The intersection of the existing Maryland Route 5, Cedar Lane, and the proposed roadway, will be serviced by a new intersection formed by a new service roadway and the proposed roadway just east of the existing Cedar Lane. The new service road starts at the existing Cedar Lane just in front of the Cedar Lane Apartments parking lot, extends southwesterly, crossing the proposed roadway approximately 270 feet west of Cedar Lane, then curving to the west to tie in to the existing Maryland Route 5. Shorter service roads are proposed to service Cedar Lane Apartments, St. Mary's Medical Center, and points on Cedar Lane south of the existing Maryland Route 5.

This alternate conforms to the same engineering design criteria used in Alternate 2. The design speeds, typical section, and methods of addressing the crossing of Town Run are given in the Alternate 2 description.



LEGEND

- WETLANDS
- FLOODPLAIN
- AIR + NOISE RECEPTOR SITES
- HISTORIC SITE
- HISTORIC BOUNDARY
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY

MARYLAND ROUTE 5 Leonardtown Bypass	
ALTERNATE 3	
SCALE: 1" = 500'	FIGURE 12

The cost of Alternate 3 is:

Preliminary Engineering	\$ 201,933
Right-of-Way	576,640
Construction	<u>2,417,970</u>
TOTAL	\$3,196,543

IV ENVIRONMENTAL IMPACTS

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IV. ENVIRONMENTAL IMPACTS

A. Social

1. Relocations

Alternate 2 would require the acquisition of one residence (occupied by its owner), a detached two-car garage, and an office. Alternate 3 would result in the acquisition of one residence and detached garage. This house is vacant and there would be no relocations. Only the No-Build Alternate (Alternate 1) would not result in any acquisition of improved properties.

In general, the area affected by the alternates is a mixture of small businesses, governmental and institutional services, and newer and older residences. Income levels are believed to be in the lower to upper middle range.

The relocations would be accomplished in accordance with the requirements of the "Uniform Relocation Assistance and Land Acquisition Policies Act of 1970" (see Appendix B). The relocations would be satisfactorily completed within an 18-month period, and in a timely, orderly, and humane manner. The required acquisitions can be accomplished with minimal impact to the economic well being of the Leonardtown area and those directly affected.

A survey of the local real estate market indicates that housing is limited, but available, in the area surrounding the project. No other federal, state, or local projects are foreseen which would affect the supply and availability of placement sites. Housing of Last Resort would be used if necessary to provide decent, safe, and sanitary replacement housing.

None of the alternates would adversely impact any minority, handicapped, or elderly individuals.

Title IV Statement

It is the policy of the Maryland State Highway Administration to ensure compliance with the provisions of Title VI of the Civil Rights

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Act of 1964, and related civil rights laws and regulations which prohibit discrimination on the grounds of race, color, sex, national origin, age, religion, physical or mental handicap in all State Highway Administration program projects funded in whole or in part by the Federal Highway Administration. The State Highway Administration will not discriminate in highway planning, highway design, highway construction, the acquisition of right-of-way, or the provision of relocation advisory assistance. This policy has been incorporated into all levels of the highway planning process in order that proper consideration may be given to the social, economic, and environmental effects of all highway projects. Alleged discriminatory actions should be addressed to the Equal Opportunity Section of the Maryland State Highway Administration for investigation.

In addition to the required acquisitions, right of way would be required from other unimproved properties. Alternate 2 would require approximately 21 acres, zoned residential, to accommodate the new alignment. Alternate 3 would require approximately 26 acres, zoned residential, and 5 acres designated for planned unit development. The No-Build Alternate does not require any property acquisition.

2. Access to Services and Facilities

The No-Build Alternate does not address the traffic congestion problems experienced in Leonardtown's General Business District (GBD). Consequently, access to area services and community facilities would become increasingly difficult for area residents as traffic volumes increase. Both motorists and non-vehicular traffic would encounter increased congestion, longer delays, continued unsafe travel conditions, and conflicts between local and through traffic.

For the most part, both build alternates would improve both local and through access, safety, and travel time by separating through from local travel, easing congestion, and providing relief from the impacts of through traffic. These improvements would benefit both those who wish to utilize services in Leonardtown as well as those services and facilities in southern St. Mary's

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County and points north. Maryland Route 5 is a major north/south route through the region. The proposed project would also provide route and speed continuity between Washington D.C. and southern St. Mary's County.

The elimination of severe congestion in town would have a beneficial effect on the provision of emergency and public services throughout the area by improving travel time and costs.

Access would be maintained to all properties both in town and near the tie-in points of the relocations and existing Md Route 5. The relocations would also better accommodate new residential development planned for the area east of Leonardtown.

3. Disruptions of Neighborhoods and Communities

The proposed build alternates would not disrupt the integrity and cohesion of existing neighborhoods, nor cause any changes to patterns of social interaction and behavior. Because the proposed build alternates would be designed for partial control of access, pedestrian and vehicular movement between future subdivisions would be accommodated.

By not removing through traffic from the GBD area, the No-Build Alternate would not improve congestion and allow improved social interaction.

Both Alternates 2 and 3 would pass close to the recreation area of the Father Andrew White School. Fencing of this area would be required to improve safety for those utilizing these facilities. No parkland or public recreational areas would be acquired for either alternate.

B. Economic

The proposed relocation of Maryland Route 5 under Alternates 2 or 3 would relieve traffic congestion and conflicts within the GBD of Leonardtown, allowing improved access to businesses and services in that area. In turn, this relief

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would improve travel time and traffic service. It would also allow improved and quicker access for through traffic destined for economic development areas north to Waldorf and Washington, D.C., and south to Lexington Park. Supplies and goods can be transported more readily through the area and employees will have better access to their workplaces.

Studies of bypasses around small towns show that when through traffic is diverted away from a town's central business district, businesses within this area frequently experience gains in retail sales. Commercial development in Leonardtown's GBD is geared more to the needs of the local community and the governmental and institutional services in the area. Because few of these businesses are geared to serve through traffic, only a small percentage of potential customers would be directed away from the town. This separation of local and through traffic would improve traffic circulation and safety, reduce delays, and make businesses in the GBD more accessible to potential local clientele.

The removal of a majority of through traffic from the GBD would help alleviate parking problems and vehicle conflicts with pedestrians and bicyclists.

The new alignments pass through land planned for low to medium density residential development. This would prevent commercial development from springing up along the new alignment which could compete with businesses in the GBD or pressure them to move out of this area. The new alignments, designed for partial control of access, would also limit the opportunity for new, competing commercial development along the roadway.

Under the No-Build Alternate, traffic congestion, delays, and safety would only worsen as traffic volumes increase. These conditions would negatively impact commercial development in the GBD by discouraging safe and quick access

to services and preventing potential customers (who must contend with delays, unsafe travel and turning conditions, and congestion) from patronizing businesses.

C. Land Use

The proposed project is consistent with both the Leonardtown Master Plan (1973) and the St. Mary's County Comprehensive Land Use Plan (1978). The improvements would also support the development of Leonardtown as one of the major activity centers in St. Mary's County. The relocation of Maryland Route 5 is a major element of these plans for improving traffic circulation through the area and separating through from local traffic service.

The undeveloped land adjacent to the proposed alignments east of Leonardtown has been designated by these plans for residential development of varying densities. The planned roadway would help support and serve this planned development and at the same time relieve congestion in Leonardtown. Because the new roadway would have partial control of access, it would have no significant impact on land use patterns or spur growth incompatible with current land use plans. The No-Build Alternate is not consistent with these plans.

D. Historic and Archeological Resources

The Ellenborough historic site is located north of Alternates 2 and 3. The State Highway Administration (SHA) has determined that Alternate 3 (Preferred) would have no effect on the historic site whereas Alternate 2 would require a change in access to the site. Alternate 2 would have an effect on the site but not an adverse effect. The Maryland Historical Trust's (MHT) concurrence in the SHA evaluations of effect for this site is contained in the Correspondence Section (see letter dated January 16, 1986). Landscaping would be provided for Alternate 2 (if it were selected) between the bypass and Ellenborough. The landscaping plan would be coordinated with the owners of Ellenborough and MHT.

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The Maryland Geological Survey stated that from an archeological perspective neither alternate would have a significant effect on the archeological record and recommended that no additional archeological work was warranted (see letter in Section V dated September 24, 1985). The State Historic Preservation Officer concurred in the Maryland Geological Survey's assessment that no further archeological investigation of the project is warranted (see letter in Section V dated January 9, 1986).

E. Natural Environment

1. Prime Farmland (Figure 7)

Both of the build alternates under consideration will affect less than 1 acre of Prime Farmland (see Table 1).

Prime Farmland soils occur west of Town Run and in the vicinity of both the Cedar Lane and St. Andrews Church Road intersections with Maryland Route 5.

Alternate 2 would require 0.82 acre of prime farmland and 13.48 acres of statewide and local important farmland, while the Preferred Alternate 3 would require 0.87 acre of prime farmland and 14.56 acres of statewide and local important farmland. There is no indication that any unique soils are present within the study area. Coordination with the Soil Conservation Service (see Farmland Impact Rating Form in Comments and Coordination Section) has been conducted as required by the Farmland Protection Policy Act (FPPA). Based upon the application of the FPPA site assessment criteria to the project alternates, it has been determined that the farmland sites be given a minimal level of consideration for protection as specified in the FPPA--7 CFR 658.4 (c)(2).

2. Floodplains (see Figures 11 and 12)

Floodplains within the study area are associated with both Town Run and Glebe Run. Both build alternates under consideration will cross the Town Run

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floodplain, requiring 2.2 acres of fill with Alternate 2 and 1.8 acres of fill with Alternate 3. In the vicinity of Glebe Run, both alternates join the existing roadway and should avoid encroachment on the 100-year floodplain.

Placement of any fill material within the 100-year floodplain will require a section 404 permit from the Army Corps of Engineers.

In accordance with the requirements of FHPM 6-7-3-2, each encroachment is being evaluated to determine its significance. A significant encroachment would involve one of the following:

- A significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route,
- A significant risk, or
- A significant adverse impact on natural and beneficial floodplain values.

The use of standard hydraulic design techniques for all waterway openings which limit upstream flood level increases and approximate existing downstream flow rates will be utilized where feasible.

Use of state-of-the-art sediment and erosion control techniques and stormwater management controls will ensure that none of the encroachments would result in risks or impacts to the beneficial floodplain values or provide direct or indirect support to further development within the floodplain. Preliminary analysis indicates that no significant floodplain impacts are expected to occur as a result of any proposed build alternates. A floodplain finding, if required, will be presented in the final environmental document.

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3. Surface Water

Town Run, Glebe Run, and one unnamed drainage tributary of each of these streams comprise the surface water resources in the study area. Both streams drain into Breton Bay, which is an inlet of the lower Potomac River.

While no modifications are anticipated for the Glebe Run crossing, hydraulic structures are proposed for crossing Town Run under Alternates 2 and 3. The tributary of Town Run will not be crossed by either build alternate. Methods of reducing the impact of stream bottom loss, such as bottomless culverts and depressing the pipes to reestablish a productive substrate, will be investigated during the design of the culverts.

The water quality of Town Run has been designated as Class I by the Department of Health and Mental Hygiene. As such, all in-stream construction may be prohibited from March 1st through June 15th.

The increase of impervious surfaces resulting from the proposed improvements would produce a proportionate increase in the amount of roadway runoff. Stormwater runoff would be managed under the Department of Natural Resources' Stormwater Management Regulations. These regulations will require stormwater management practices in the following order of preference:

- On-site infiltration
- Flow attenuation by open vegetated swales and natural depressions
- Stormwater retention structures
- Stormwater detention structures

It has been demonstrated that these measures can significantly reduce pollutant loads and control runoff.

Final design for the proposed improvements will include plans for grading, erosion and sediment control, and stormwater management, in accordance with

state and federal laws and regulations. They will require review and approval by the Maryland Department of Natural Resources-Water Resources Administration (WRA) and the Department of Health and Mental Hygiene-Office of Environmental Programs (OEP). A waterway construction permit will also be required from the Department of Natural Resources.

This project proposes construction within the Chesapeake Bay Critical Area and will be reviewed by the Coastal Zone Management of the Department of Natural Resources to ensure consistency with the goals and objectives of the program.

4. Habitat (see Figures 11 and 12)

Both terrestrial and aquatic habitats would be affected by the proposed action. A comparison of the amounts of woodland and wetland habitats required for right-of-way is shown in Table 1.

a. Terrestrial

Species such as deer, rabbit, squirrel, racoon, dove, waterfowl, reptiles, amphibians, and fish are representative of the wildlife populations in the study area. Coordination with the Maryland Department of Natural Resources, Wildlife Administration, and U.S. Fish and Wildlife Service indicates that there are no known populations of federally-listed threatened or endangered plant or animal species in the study area. (See correspondence from these agencies in Section V.)

Alternate 2 will require approximately 15.5 wooded acres compared to 14.9 acres for Alternate 3. The loss of habitat is generally accompanied by a proportional loss in animal populations inhabiting the study area.

b. Aquatic

Efforts were made to minimize wetland impacts associated with construction of the proposed project. The tidal and non-tidal wetlands adjacent to Glebe Run will be avoided by transitioning the proposed roadway into existing Maryland

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Route 5 prior to St. Andrews Church Road. Impacts to non-tidal wetlands associated with Town Run were unavoidable due to the occurrence of these wetlands along the entire length of the stream south to existing Maryland Route 5. Approximately 1.7 acres of non-tidal wetlands will be required with Alternate 2, while 1.4 areas of non-tidal wetlands will be required for construction of Alternate 3. These palustrine forested wetlands also occur within the 100-year floodplain of Town Run.

Potential impacts resulting from construction of the proposed roadway and stream crossing include sedimentation, pollution by roadway runoff, and loss of vegetative cover.

Sediment and erosion control plans will help minimize the adverse effects of construction activities, and proper stormwater management will reduce the amount of roadway pollutants which enter Town Run. These control measures should minimize the potential adverse impacts to aquatic life.

Suitable replacement sites for tidal and non-tidal wetlands will be coordinated with the Department of Natural Resources and selected during the design phase.

F. Noise Levels and Noise Impacts

The method used to predict the future noise levels from proposed Maryland Route 5 was developed by the Federal Highway Administration (FHWA) of the U.S. Department of Transportation. The FHWA Highway Traffic Noise Prediction Model (FHWA Model) incorporates data pertaining to normal traffic volume increases over time, utilizes experimentally and statistically determined reference sound level for three class of vehicles (auto, medium duty trucks, and heavy duty trucks), and applies a series of adjustments to each reference level to arrive at the predicted sound level. The adjustments include: 1) traffic flow

corrections, taking into account the number of vehicles, average vehicle speed, and specifies a time period of consideration; 2) distance adjustment, comparing a reference distance and actual distances between receiver and roadway, including roadway width and number of traffic lanes; and 3) adjustment for various types of physical barriers that would reduce noise transmission from source (roadway) to receiver.

The prediction calculations were performed utilizing a computer program adaptation of the FHWA Model, STAMINA 2.0/OPTIMA.

The determination of environmental noise impacts is based on the relationship between the predicted noise levels, the established noise abatement criteria, and the ambient noise levels in the project area. The applicable standard is the Federal Highway Administration's noise abatement criteria/activity relationship (see Table 4) published in FHPM 7.7.3.

When design year L_{eq} noise levels are projected to exceed the abatement criteria (Table 4) or increases ambient conditions by more than 10 dBA, noise abatement measures (in general, noise barriers) are considered to minimize impacts. Consideration is based on the size of the impacted area (number of structures, spacial distribution of structures, etc.), the predominant activities carried on within the area, the visual impact of the control measures, practicality of construction, and economic feasibility.

Economic assessment is based on the following assumptions. An effective barrier should, in general, extend in both directions to four times the distance between receiver and roadway (source). In addition, an effective barrier should provide a 10 dBA reduction in the noise level, as a preliminary design goal. For the purpose of comparison, a total cost of \$23 per square foot is assumed to estimate total barrier cost. This cost figure is based upon current costs

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experienced by Maryland State Highway Administration and includes the costs of panels, footings, drainage, landscaping, and overhead. In addition, the upset limit for determining cost-effectiveness is \$40,000 per residence. This is an average cost figure based on current and projected barrier costs by the Maryland State Highway Administration.

1. No-Build Alternate

A total of six noise sensitive areas are associated with this alternate. The projected L_{eq} noise levels would increase 1-7 dBA over existing levels. None of the projected levels will exceed the noise abatement criteria of 67 dBA or increase over ambient levels by 10 dBA or more.

2. Build Alternate 2

A total of five noise sensitive areas are associated with this alternate. The projected 2015 noise levels for these NSAs would increase 2-20 dBA over existing levels. None of the noise sensitive areas will have projected 2015 noise levels in excess of the noise abatement criteria. However, NSAs 3 and 4 will have 2015 noise levels 10 dBA or greater than the existing levels. The following is a discussion regarding the feasibility of abatement at these two locations.

a. Noise Sensitive Area 3

Noise sensitive area 3 will have a projected 2015 noise level of 20 dBA (64 dBA) above the ambient level of 44 dBA. This is an edge of right-of-way receptor; therefore, mitigation is not recommended.

b. Noise Sensitive Area 4

Noise sensitive area 4 will have a projected 2015 noise level of 45 dBA which is 10 dBA above the ambient level of 45 dBA. This site is approximately 300 to 350 feet from the proposed roadway. At this distance, any mitigation

measure would only provide minimal attenuation of 0-1 dBA. In addition, segmentation of a barrier system would be necessary at the intersection of Cedar Lane Road. Based on these physical factors, a barrier is not recommended for this location.

3. Build Alternate 3

A total of five noise sensitive areas are associated with this alternate. The projected 2015 noise levels for these NSAs would increase 1-10 dBA over existing levels. None of the noise sensitive areas will have projected 2015 noise levels in excess of the noise abatement criteria. However, NSA 4 will have a 2015 noise level 10 dBA above the ambient level. For NSA 4, the feasibility of abatement discussion for Alternate 3 would apply here also.

G. Air Quality Impacts

1. Analysis Objectives, Methodology, and Results

The objective of the air quality analysis is to compare the carbon monoxide (CO) concentrations estimated to result from traffic configurations and volumes of each alternate with the State and National Ambient Air Quality Standards (S/NAAQS). The NAAQS and SAAQS are identical for CO: 35 parts per million (PPM) for the maximum 1-hour period and 9 PPM for the maximum consecutive 8-hour period.

A microscale CO pollution diffusion analysis was conducted using the third generation California Line Source Dispersion Model, CALINE 3. This microscale analysis consisted of projections of 1-hour and 8-hour CO concentrations at sensitive receptor sites under worst case meteorological conditions for the No-Build and the build alternates for the design year (2015) and the estimated year of completion (1995).

2. Analysis Inputs

A summary of analysis inputs is given below. More detailed information

concerning these inputs is contained in the Maryland Route 5 Air Quality Analysis, which is available for review at the Maryland State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

a. Background CO Concentrations

In order to calculate the total concentration of CO which occurs at a particular receptor site during worst case meteorological conditions, the background CO concentrations are considered in addition to the levels directly attributable to the facility under consideration. Due to the lack of CO ambient air quality data, the background concentration resulting from areawide emissions from both mobile and stationary sources was assumed to be as follows:

	CO, PPM	
	1 Hour	8 Hour
1995	2.0	1.0
2015	2.0	1.0

b. Traffic Data, Emission Factors, and Speeds

The appropriate traffic data were utilized as supplied by the Bureau of Highway Statistics (September and November 1985) of the Maryland State Highway Administration.

The composite emission factors used in the analysis were derived from the Environmental Protection Agency (EPA) Compilation of Air Pollutant Emission Factors: Highway Mobile Sources, and the Modification to MOBILE 2, which were used by the EPA to Respond to Congressional Inquiries on the Clean Air Act, and were calculated using the EPA MOBILE 2.5 computer program. An ambient air temperature of 20 degrees Fahrenheit was assumed in calculating the emission factors for both the 1-hour and 8-hour analyses. Credit for a vehicle inspection

maintenance (I/M) emission control program was not included in the emission factor calculations.

Average vehicle operating speeds used in calculating the emission factors were based on the capacity of each roadway link considered, the applicable speed limit, and external influences on speed through the link from immediately adjacent links. Average operating speeds ranged from 18 mph to 40 mph depending upon the roadways and alternate under consideration.

c. Meteorological Data

Worst-case meteorological conditions of 1 meter/second for wind speed and atmospheric stability class F were assumed for both the 1-hour and 8-hour classifications. In addition, as stated above, a worst-case temperature of 20 degrees Fahrenheit was assumed.

The wind directions utilized as part of the analysis were rotated to maximize CO concentrations at each receptor location. Wind directions varied for each receptor and were selected through a systematic scan of CO concentrations associated with different wind angles.

3. Sensitive Receptors

Site selection of sensitive receptors were made on the basis of proximity to the roadway, type of adjacent land use, and changes in traffic patterns on the roadway network. Seven receptor sites were chosen for this analysis consisting of four residences, two schools, and a church. The receptor site locations were verified during study area visits by the analysis team. The receptor sites are shown on the alternates mapping (see Figures 11 and 12 as well as Table 7).

4. Results of Microscale Analysis

The results of the calculations of CO concentrations at each of the sensitive

TABLE 7

Air Receptor Sites
Maryland Route 5

<u>Site No.</u>	<u>Description/Location</u>
1	Father Andrew White School, Maryland Route 5 (Washington Street)
2	St. Paul's United Methodist Church, Maryland Route 5 (Washington Street)
3	Edge of right-of-way site (Ellenborough Historic Site)
4	Cedar Lane Apartments, Cedar Lane Road
5	Residence, 1-story brick, Maryland Route 5 (Leonardtwn/Point Lookout Road)
6	Ryken High School, Brother's House
7	Residence, 1 1/2-story stucco, Maryland Route 5/Maryland Route 4 Intersection

receptor sites for the No-Build and build alternates are shown in Table 8. The values shown consist of predicted CO concentrations attributed to traffic on various roadway links plus projected background levels. A comparison of the values in Table 8 with the S/NAAQS shows that no violations will occur for the No-Build or build alternates in 1995 or 2015 for the 1-hour or 8-hour concentrations of CO. The projected CO concentrations vary between alternates, depending on receptor locations as a function of the roadway locations and traffic patterns associated with each alternate.

The No-Build alternate generally results in the highest CO concentrations in 1995 and 2015, while the build alternates result in slightly lower CO concentrations. The only exceptions are for Receptors 3 and 4 which will be closer to the proposed bypass alternates than the existing Maryland Route 5 No-Build network. The concentrations remain well below the S/NAAQS for all alternates under consideration.

In conclusion, the No-Build alternate and build alternates will not result in violations of the 1-hour or 8-hour S/NAAQS in 1995 or 2015.

5. Construction Impacts

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

The Maryland Bureau of Air Quality Control was consulted to determine the adequacy of the specifications in terms of satisfying the requirements of the Regulations Governing the Control of Air Pollution in the State of Maryland.

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TABLE 8
CO Concentrations* at Each Receptor Site, PPM

Receptors	1995						2015					
	No-Build		Alternate 2		Alternate 3		No-Build		Alternate 2		Alternate 3	
	1 HR	8 HR	1 HR	8 HR	1 HR	8 HR	1 HR	8 HR	1 HR	8 HR	1 HR	8 HR
1	4.2	2.6	3.8	2.3	3.8	2.6	4.8	3.0	4.2	2.6	3.9	2.4
2	6.3	3.9	4.5	2.5	4.5	2.6	7.2	4.6	4.4	2.7	4.4	2.7
3	2.5	1.3	3.5	2.1	2.6	1.5	2.6	1.4	3.3	2.4	2.7	1.7
4	2.5	1.4	2.7	1.6	2.8	1.6	2.6	1.6	2.8	1.6	2.9	1.7
5	3.4	2.1	2.6	1.4	3.0	1.7	3.6	2.4	2.6	1.6	3.0	1.8
6	2.9	1.6	2.5	1.4	2.8	1.5	3.0	1.8	2.5	1.4	2.8	1.5
7	3.1	1.8	2.7	1.4	2.8	1.5	3.3	2.2	2.5	1.4	2.8	1.6

*Includes Background Concentrations.

The S/NAAQS for CO: 1 HR maximum = 35 PPM
8 HR maximum = 9 PPM

The Maryland Bureau of Air Quality Control found that the specifications are consistent with the requirements of these regulations. Therefore, during the construction period, all appropriate measures (Code of Maryland Regulations 10.18.06.03D) will be taken to minimize the impact on the air quality of the area.

6. Conformity with Regional Air Quality Planning

The project is in an area where the State Implementation Plan (SIP) does not contain any transportation control measures. Therefore, with the exception of the construction procedures, the conformity requirements of 23 CFR 770 do not apply to this project.

7. Agency Coordination

Copies of the technical Air Quality Analysis are being circulated to the U.S. Environmental Protection Agency and the Maryland Air Management Administration for review and comment.

V COMMENTS & COORDINATION

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V. COMMENTS AND COORDINATION

In addition to correspondence with appropriate resource agencies, this project has been coordinated with representatives of the Maryland Department of Natural Resources - Water Resources Administration, Environmental Protection Agency, U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers at the State Highway Administration Quarterly Interagency Review Meeting on February 21, 1985.

An Alternate Public Meeting was held at Leonardtown Middle School on June 12, 1985, to present preliminary study alternates for public comment. The comments received as a result of this meeting were considered in developing the alternates for detailed study.

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Maryland Historical Trust

September 14, 1979

Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21218

Subject: Maryland Route 5 Relocated, from Md. Rt. 245 to St. Andrews
Church Road, Leonardtown - Contract No. SM 714-101-571

Dear Mr. Camponeschi:

A preliminary reconnaissance has recently been completed of the area shown on the attached map. The following historic sites have been identified, and their levels of significance are as follows:

- | | | |
|-----|---|---|
| A | Thomas Filkerton House
151 Blacksmith Road, for its architecture | Local |
| MHT | STMA 68 Ellenborough
Cedar Lane, for its architecture and
historical associations | Pending nomi-
nation to the
National Register |
| MHT | STMA 52 Buena Vista
Route 5, for its architecture | Possible NR
eligible |
| MHT | STMA 67 Methodist Meeting House Cemetery
Route 5, for its historical associations | Local |
| B | Graves House
248 Route 5, for its architecture | Local |
| C | Gough Farm
Route 5, for its architecture | Local |
| D | Farm
Route 5, for its architecture | Local |
| E | Mattingly/Edwards Farm
Route 5, for its architecture | Local |
| F | House at 81 Washington Street
for its architecture | Local |

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Mr. Eugene T. Camponeschi

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September 14, 1979

- G Long House
87 Washington Street, for its architecture Local
- H Farm
North of 87 Washington Street, for its architecture Local
- I W.W. Sawyer House
Opposite 87 Washington Street, for its architecture Local
- J Wentworth House
Opposite 129 Washington Street, for its architecture Possible NR
Eligible

It should be noted that the area surveyed does not include most of the town center of Leonardtown, which contains additional historic sites.

Sincerely,

Peter E. Kurtze

Peter E. Kurtze
Historic Sites Surveyor

Peggy B. Weissman

Peggy B. Weissman
Historic Sites Surveyor

PK:PW:van
Enclosure

cc: M.Edwards
W.Hopkins
R.Krolak
R.Suffness
P.Weissman



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Department of Natural Resources
MARYLAND FOREST, PARK & WILDLIFE SERVICE
Tawes Office Building
Annapolis, Maryland 21401

TORREY C. BROWN, M.D.
SECRETARY

DONALD E. MACLAUCHLAN
DIRECTOR

April 17, 1985

Cynthia D. Simpson
Environmental Management
Maryland Department of Transportation
P.O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

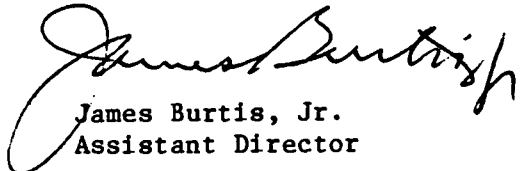
RE: Contract No. SM714-102-571
Md. Rt. 5 Relocated from
St. Andrew's Church Rd. to
Md. Rt. 245 (Leonardtwn
Bypass) P.D.M.S. No.183005

Dear Ms. Simpson:

Your request for any information we may have concerning threatened or endangered species was reviewed by Gary J. Taylor.

There are no known populations of listed threatened or endangered species within the area of project influence in St. Mary's County.

Sincerely,


James Burtis, Jr.
Assistant Director

JB:emp

cc: G. Taylor
C. Brunori

V-4

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TORREY C. BROWN, M.D.
SECRETARY
JOHN R. GRIFFIN
DEPUTY SECRETARY

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

FRED L. ESKEW
ASSISTANT SECRETARY
FOR CAPITAL PROGRAMS

April 19, 1985

Mr. Louis H. Ege, Jr.
Bureau of Project Planning
707 North Calvert Street
Baltimore, Maryland 21203

Subject: Maryland Route 5 - Leonardtown Bypass
Contact No. SM 714-102-571

Dear Mr. Ege:

The Maryland Natural Heritage Program has no record of any rare, threatened or endangered species, unusual habitat or other significant natural feature within the project corridor for this study as delineated in your submittal of April 8, 1985. However, one state-rare freshwater clam, Alasmidonta heterodon, is known from McIntosh Run, the next tributary to the west. Since A. heterodon is presently a Category II candidate under consideration for listing as a Threatened or Endangered species, I recommend that Town Run be surveyed to determine if it occurs within this project area.

If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

Arnold W. Norden
Maryland Natural Heritage Program

AWN:mcs
cc: Andy Moser, U.S. Fish
and Wildlife Service



United States Department of the Interior

FISH AND WILDLIFE SERVICE
DIVISION OF ECOLOGICAL SERVICES
1825B VIRGINIA STREET
ANNAPOLIS, MARYLAND 21401

April 26, 1985

Ms. Cynthia D. Simpson
Environmental Management
State Highway Administration
P.O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203

Re: Contract No. SM 714-102-571
Maryland Route 5 Relocated
Leonardtwn Bypass

Dear Ms. Simpson:

This responds to your April 8, 1985, request for information on the presence of Federally listed endangered or threatened species within the area of the cited project.

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species 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 the distribution of 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.

Thank you for your interest in endangered species. If you have any questions or need further assistance, please contact Andy Moser of our Endangered Species staff at (301) 269-6324.

Sincerely yours,

Glenn Kinser

Glenn Kinser
Supervisor
Annapolis Field Office

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TORREY C. BROWN, M.D.
SECRETARY

JOHN R. GRIFFIN
DEPUTY SECRETARY

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
MARYLAND GEOLOGICAL SURVEY

THE ROTUNDA
711 W. 40TH STREET, SUITE 440
BALTIMORE, MARYLAND 21211

KENNETH N. WEAVER
DIRECTOR
MARYLAND GEOLOGICAL SURVEY

EMERY T. CLEAVES
DEPUTY DIRECTOR

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1000

Division of Archeology
338-7236

24 September 1985

Mr. Louis H. Ege, Jr.
Bureau of Project Planning
State Highway Administration
P.O. Box 717/707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: MD ⁵X-Leonardtown Bypass
St. Mary's County

Dear Mr. Ege:

On 17 September 1985, Spencer O. Geasey and I conducted an archeological survey of the subject project. One archeological site (18ST549) was located on the northern alignment. This site is situated in a soybean field, and the crop cover precluded examination of the central portions of the site as projected on the attached map. However, exposures along the field edges were sufficient to assess those areas proposed for the main northern alignment and a tie-in road. Material recovered from 18ST549 includes:

- 1 quartz side-notched projectile point fragment (Late Archaic)
- 4 bifacially worked pieces of quartz
- 1 quartzite biface fragment
- 7 quartz chunks
- 5 quartz cobble fragments
- 19 quartz flakes/shatter
- 3 quartzite flakes

A small concentration was noted at the north end of the site, and a light scatter of artifacts was observed along the site's western edge. The majority of artifacts, however, came from the southern tip of the site. Although "concentrated", this southern area's artifact density is quite low (probably less than one artifact per square meter on average despite 90% visibility). Given the low density of material, the correspondingly poor research potential, and the abundance of other Late Archaic sites in St. Mary's County, the site is not considered significant, and no further archeological study is warranted.

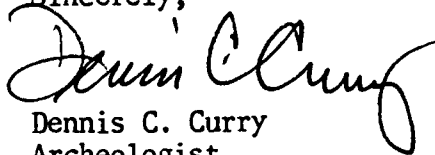
87

Examination of the remainder of the northern alignment and all of the southern alignment failed to locate any other archeological sites. Occasional artifacts--especially historic--were noted in several tracts examined, but never in sufficient numbers to constitute a site. As a result, no additional archeological investigation of this project is recommended.

The southern alignment would be preferred from an archeological perspective, since it would have no effect on archeological resources, although neither alignment would have significant effect on the archeological record.

Details of the present survey will be recorded in an addendum report to our 1980 study; in the meantime, if I can be of further assistance on this matter, please let me know.

Sincerely,



Dennis C. Curry
Archeologist

DCC:lw

cc: Cynthia Simpson
Rita Suffness

Attachment

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BUREAU OF
PROJECT PLANNING

JAN 10 1 39 PM '86

Maryland Historical Trust

January 9, 1986

Mr. Louis H. Ege, Jr., Acting Chief
Bureau of Project Planning
Maryland Department of Transportation
State Highway Administration
P. O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203

RE: Contract No. SM 714-102-571
Maryland Route 5 Relocated
from St. Andrews Church Road
to Maryland Route 245
Leonardtwn By-Pass

Dear Mr. Ege:

Based upon the results of the Phase 1 archeological reconnaissance conducted of the project area, we concur that the above-referenced project will have no effect upon significant archeological resources. Therefore, additional archeological investigations are not warranted for this particular project.

Sincerely,

Richard B. Hughes
State Administrator
of Archeology

RBH/ERE/hec

cc: Mr. Tyler Bastian
Ms. Rita Suffness
Dr. Ralph Eshelman
Mr. David Roberts

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BUREAU OF
PROJECT PLANNING

JAN 17 9 28 AM '86

Maryland Historical Trust

January 16, 1986

Ms. Cynthia Simpson
Acting Chief, Environmental Management
Maryland Dept. of Transportation State Highway
Administration
PO Box 717, 707 North Calvert Street
Baltimore, Maryland 21203-0717

Re: Contract No. SM 714-102-571
Maryland Route 5 Relocated
from St. Andrews Church Road
to Maryland Route 245
P. D.M.S. No. 183005

Dear Ms. Simpson:

Thank you for your letter of November 4, 1985, regarding proposed alignments for Maryland Route 5 relocated. Our office agrees with SHA that Alternate 3 Modified with Tie-In B will have no effect on Ellenborough. We believe that Alternate 2 will have no adverse effect on Ellenborough provided that adequate landscaping is placed along the new road near the historic site. The landscape should be acceptable to the owners of Ellenborough and receive concurrence from our office prior to implementation.

Please call if you have any questions or comments.

Sincerely,

George J. Andreve
Environmental Review
Administrator

GJA/hec

cc: Ms. Rita Suffness
Dr. Ralph Eshelman
Mr. David Roberts

V-10

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency) Date Of Land Evaluation Request
November 25, 1985

Name Of Project
MD Route 5 relocated at Leonardtown
Federal Agency Involved
FHWA/MD State Highway Administration

Proposed Land Use
Residential/Agricultural/Institutional
County And State
St. Mary's County, Maryland

PART II (To be completed by SCS) Date Request Received By SCS
Dec. 3, 1985

Does the site contain prime, unique, statewide or local important farmland?
(If no, the FPPA does not apply - do not complete additional parts of this form). Yes No
 Acres Irrigated NONE Average Farm Size 107 Ac.

Major Crop(s)
Corn, Tobacco, Soybeans
Farmable Land In Govt. Jurisdiction
Acres: 187,675 % 57.4
Amount Of Farmland As Defined in FPPA
Acres: 175,394 % 54

Name Of Land Evaluation System Used
St. Mary's County Land Evaluation
Name Of Local Site Assessment System
None (FPPA)
Date Land Evaluation Returned By SCS
Dec. 31, 1985

PART III (To be completed by Federal Agency)

	Alternative Site Rating			
	Alt. 1 Site A	Alt. 2 Site B	Site C	Site D
A. Total Acres To Be Converted Directly	29.7	25.8		
B. Total Acres To Be Converted Indirectly	0	0		
C. Total Acres In Site	29.7	25.8		

PART IV (To be completed by SCS) Land Evaluation Information

A. Total Acres Prime And Unique Farmland	.82	.87		
B. Total Acres Statewide And Local Important Farmland	13.48	14.56		
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0.00008	0.00009		
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	100	85		

PART V (To be completed by SCS) Land Evaluation Criterion
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)

	38.8	50.7		
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PART VI (To be completed by Federal Agency)

Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))	Maximum Points	Alt. 1	Alt. 2		
1. Area In Nonurban Use	15	14	14		
2. Perimeter In Nonurban Use	10	6	7		
3. Percent Of Site Being Farmed	20	0	0		
4. Protection Provided By State And Local Government	20	0	0		
5. Distance From Urban Builtup Area	0	0	0		
6. Distance To Urban Support Services	0	0	0		
7. Size Of Present Farm Unit Compared To Average	10	3	3		
8. Creation Of Nonfarmable Farmland	25	0	0		
9. Availability Of Farm Support Services	5	5	5		
10. On-Farm Investments	20	10	10		
11. Effects Of Conversion On Farm Support Services	25	0	0		
12. Compatibility With Existing Agricultural Use	10	0	0		
TOTAL SITE ASSESSMENT POINTS	160	38	39		

PART VII (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V)	100	38.8	50.7		
Total Site Assessment (From Part VI above or a local site assessment)	160	38	39		
TOTAL POINTS (Total of above 2 lines)	260	76.8	89.7		

Site Selected: _____ Date Of Selection _____ Was A Local Site Assessment Used?
Yes No

Reason For Selection: _____

VI APPENDICES

VI. APPENDICES

APPENDIX A

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Rogers, J. et. al., 1976. Maryland Upland Natural Areas Study; Maryland Department of Natural Resources.

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U.S. Fish and Wildlife Service, 1983. National Wetlands Inventory.

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Maryland Geological Survey, Bulletin 19, Baltimore, Maryland.

APPENDIX B

"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, Real Property, Title 12, Subtitle 2, Sections 12-201 thru 12-212. 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. Certain payments may also be made for increased mortgage interest costs and/or incidental expenses, provided that the total of all housing benefits does not exceed the above mentioned limits. 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 expenses are limited to a 50 mile radius. The expenses claimed for actual cost commercial moves must be supported by receipted bills. An inventory of the items to be moved must be prepared in all cases. In self-moves, the State will negotiate an amount for payment, not to exceed the lowest acceptable bid obtained. The allowable expenses of a self-move may include amounts paid for equipment hired, the cost of using the business' own vehicles or equipment, wages paid to persons who physically participate in the move, the cost of actual supervision of the move, replacement insurance for the personal property moved, costs of licenses or permits required, and other related expenses.

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 the personal property is not moved but is replaced at the new location, the payment would be the lesser of the replacement cost minus the net proceeds of sale (or trade-in value) 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. When personal property is abandoned without an effort by the owner to dispose of the property for sale, unless permitted by the State, 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 \$1,000. All expenses must be supported by receipted bills. Time spent in the actual search may be reimbursed on an hourly basis, within the maximum limit.

In lieu of the payments described above, the business may elect 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 during the two taxable years prior to displacement.

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 earnings 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 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, the owner of the business may still be eligible to receive the "in lieu of" payment. In all cases, the owner of the business must provide information to support its net earnings, such as income tax returns, for the tax years in question.

For displaced farms and non-profit organizations, the 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 from 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 discontinued 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 along with required preliminary notice of possible displacement.

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 must be completed by the State Highway Administration before "housing as a last resort" can be utilized.

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 persons, 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.