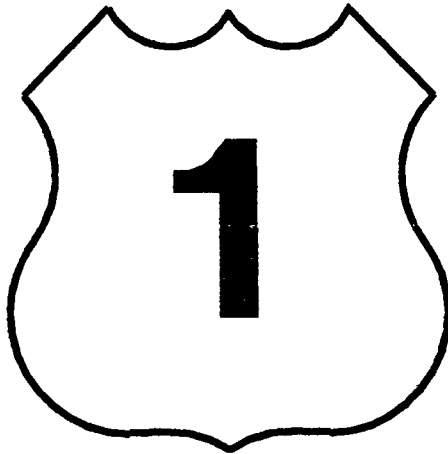


***FINAL ENVIRONMENTAL
IMPACT STATEMENT***

SECTION 4(f) EVALUATION

U. S. ROUTE 1



**FROM SILVER SPRING ROAD TO
MARYLAND ROUTE 152
CONTRACT NO. B 813-101-471
BALTIMORE COUNTY AND HARFORD COUNTY, MD**

**PREPARED BY:
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

**AND:
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION**

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STATE HIGHWAY ADMINISTRATION**

REGION III FHWA-MD-EIS-88-01-F

U.S. ROUTE 1

From Silver Spring Road in Baltimore County, MD to
Maryland Route 152 in Harford County, MD

FINAL ENVIRONMENTAL IMPACT STATEMENT

SECTION 4(F) EVALUATION

Submitted Pursuant to 42 U.S.C. 4332(2) (c)
and 49 U.S.C. 303(c)

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

MARYLAND DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY ADMINISTRATION

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The purpose of this project is to study proposed alternates for the improvement of U.S. Route 1 from Silver Spring Road in Baltimore County to MD Route 152 in Harford County, a distance of approximately nine miles. The proposed alternates are designed to alleviate safety deficiencies and provide adequate capacity for traffic through the project design year of 2015.

Some of the unavoidable impacts associated with this project include residential and business relocations and acquisition of parkland.

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SUMMARY

1. **Administrative Action**

Environmental Impact Statement

() Draft (x) Final
(x) Section 4 (f) Evaluation

2. **Description of Proposed Action**

This project involves reconstruction of U.S. Route 1 (Belair Road) from Silver Spring Road in Baltimore County to Maryland Route 152 in Harford County.

The purpose of the Project Planning study is to develop and analyze improvement alternates for U.S. Route 1 to alleviate safety deficiencies and provide adequate capacity for vehicular traffic through the project Design Year 2015.

U.S. Route 1 crosses Gunpowder Falls State Park at two locations within the study limits.

3. **Alternatives Considered**

During Stage I of this project, two build alternates and the no-build alternate were studied. Subsequent to the Alternates Public Meeting, held in April of 1987, a modified version of the build alternates, in addition to the no build alternate, were studied in detail.

No-Build Alternate

No major improvements would be made to the existing roadway. Normal maintenance would continue and spot safety improvements would be undertaken where feasible. The No Build

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Alternate will not require any major construction or right-of-way costs. In addition, no residential or commercial displacements would be required. The No Build Alternate, however, would not provide any improvement in traffic safety or capacity. This will result in increased congestion and accidents as traffic volumes increase.

Build Alternates

Two basic build alternates, a Six-Lane Alternate and a Four-Lane Alternate, were developed for Stage I of the U.S. Route 1 Project. The proposed build alternates generally follow the existing horizontal alignment, with widening on one or both sides depending upon physical constraints and environmental impacts. Where possible, consideration was given to modifying the rolling nature and steep grades on the existing road.

Six-Lane Modified Alternate (Selected)

The Six-Lane Modified Alternate would provide a minimum of 6 through lanes from Silver Spring Road to Maryland Route 152. The typical cross section will vary from segment to segment depending upon safety requirements and adjacent land use. The typical sections considered vary with respect to the treatment of the center lane area. Throughout most of the corridor, the center area will consist of a 16-foot, raised, grass median. Urbanized areas will be provided with frequent median crossovers and/or center left turn lanes. In less developed areas, median crossovers will be restricted to major crossroads.

Four-Lane Alternate

The Four-Lane Alternate was developed to reduce the number of residential and business relocations associated with the Six-Lane Alternate. Similar to the Six-Lane Alternate, the typical cross section of the Four-Lane Alternate will vary from segment to segment depending upon the capacity requirements and adjacent land use. This alternate was eliminated from consideration, however, because it failed to adequately satisfy project needs.

Kingsville Options (Selected Alternate Option F)

A number of options were studied for the Kingsville Community in an attempt to minimize community impacts and to avoid impacts to historic sites. Three designs were selected for detailed studies (Options B, E Modified and F). These options are discussed in the Alternatives section of this document.

4. Areas of Controversy/Unresolved Issues

There are two on-going citizen groups that are providing continuing input for the U.S. Route 1 project. The Citizen's Advisory Committee for the Widening of Belair Road, Phase II (The "CAC") has held several meetings with the project planning team. The committee also developed a detailed version of the Four-Lane Alternate. This alternate was reviewed by SHA and found to have some merit. Many of the features of the "CAC Alternate" have been incorporated in the Six-Lane Alternate presented in this document, including alignment shifts to avoid the Grandstand Restaurant (a community meeting place), median openings for busy commercial areas in Perry Hall and the elimination of a seventh lane between Silver Spring Road and Joppa Road East.

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The project planning team has also met with the Greater Kingsville Civic Association. Their interest led directly to the development of several optional designs for the Kingsville area. The selected Kingsville option (Option 'F') minimizes impacts to homes, businesses and pedestrian movements and has been endorsed by the Kingsville Community Association. Both groups will also continue to provide input throughout the study process.

5. Permits Required

Construction of this project would require review and approval for the following permits:

- U.S. Army Corps of Engineers -- Section 404 Permit
- Maryland Department of the Environment -- Approved Sediment Control Plan
- Maryland Department of the Environment -- Approved Stormwater Management Plan
- Maryland Department of Natural Resources -- Waterway Construction Permit
- Maryland Department of the Environment - Water Quality Certificate

6. Summary of Impacts

Table S-1 compares the major areas of concern associated with each alternate.

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SUMMARY OF IMPACTS

TABLE S-1

| | NO BUILD | 4-LANE | 6-LANE (SELECTED ALTERNATE) | | |
|---|-------------|--------|--------------------------------|-------|-------|
| | | | B* | E* | F* |
| <u>SOCIOECONOMIC</u> | | | | | |
| Residential Units Taken | 0 | 20 | 22 | 21 | 21 |
| Families Displaced | 0 | 21 | 22 | 21 | 21 |
| Businesses Displaced | 0 | 45 | 60 | 57 | 52 |
| Consistent with Master Plan | No | No | Yes | Yes | Yes |
| <u>NATURAL ENVIRONMENT</u> | | | | | |
| Parkland (Ac.) | 0 | 10.8 | 19.4 | 19.4 | 19.4 |
| Prime Farmland (Ac.) | 0 | +10.1 | +11.4 | +11.4 | +11.4 |
| Stream Realignment (L.F.) | 0 | 0 | 0 | 0 | 0 |
| New Stream Crossings | 0 | 0 | 0 | 0 | 0 |
| Wetlands (Ac.) | 0 | 1.4 | 1.4 | 1.4 | 1.5 |
| Floodplain (Ac.) | 0 | 1.2 | 1.5 | 1.5 | 1.5 |
| <u>MAN-MADE ENVIRONMENT</u> | | | | | |
| Historic Sites Affected (Ac.) | 0 | 0 | 0 | 0 | 0 |
| Archaeological Sites Affected (Ac.) | 0 | 0 | 0 | 0 | 0 |
| Air Impact (Sites exceed. std's.) | 0 | 0 | 0 | 0 | 0 |
| Noise Impact (Sites exceed. evaluation criteria) | 4 | 5 | 6 | 6 | 6 |
| <u>COST (in millions \$)</u> | | | | | |
| Right-of-Way/Engineering | 0 | -- | 32.3 | 34.6 | 29.7 |
| Construction | 0 | -- | 71.2 | 71.1 | 68.1 |
| Total | 0 | 58.8 | 103.5 | 105.7 | 97.8 |

* Kingsville Options including mainline

The following Environmental Assessment Form is a requirement of the Maryland Environmental Policy Act and the Maryland Department of Transportation Order 11.01.06.02. Its use is in keeping with provisions of 1500.4 (k) and 1506.2 and .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 sections of the document, as indicated in the "Comment" column of the form, for a description of specific characteristics of the natural or 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.

ENVIRONMENTAL ASSESSMENT FORM (EAF)

| | <u>YES</u> | <u>NO</u> | <u>COMMENTS ATTACHED</u> |
|---|---------------|---------------|--|
| A. Land Use Considerations | | | |
| 1. Will the action be within the 100 year floodplain? | <u>X</u> | <u> </u> | <u>IV.C.6</u> |
| 2. Will the action require a permit for construction or alteration within the 50 year floodplain? | <u>X</u> | <u> </u> | <u> </u> |
| 3. Will the action require a permit for dredging, filling, draining, or alternation of a wetland? | <u>X</u> | <u> </u> | <u>IV.C.5</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> </u> | <u>X</u> | <u> </u> |
| 5. Will the action occur on slopes exceeding 15%? | <u>X</u> | <u> </u> | <u>III.B.1</u> |
| 6. Will the action require a grading plan or a sediment control permit? | <u>X</u> | <u> </u> | <u>IV.C.1</u> |
| 7. Will the action require a mining permit for deep or surface mining? | <u> </u> | <u>X</u> | <u> </u> |
| 8. Will the action require a permit for drilling a gas or oil well? | <u> </u> | <u>X</u> | <u> </u> |
| 9. Will the action require a permit for airport construction? | <u> </u> | <u>X</u> | <u> </u> |
| 10. Will the action require a permit for the crossing of the Potomac River by conduits, cables or other like devices? | <u> </u> | <u>X</u> | <u> </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> | <u> </u> | <u>Access will be enhanced Section V</u> |

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| | YES | NO | COMMENTS ATTACHED |
|---|----------|----------|-------------------|
| 12. Will the action affect the use of any natural or man-made features that are unique to the County, State, or Nation? | _____ | <u>X</u> | _____ |
| 13. Will the action affect the use of an archaeological or historical site or structure? | _____ | <u>X</u> | _____ |
| B. Water Use Considerations | | | |
| 14. Will the action require a permit for the change of the course, current, or cross-section of a stream or other body of water? | <u>X</u> | _____ | <u>IV.C.6</u> |
| 15. Will the action require the construction, alteration, or removal of a dam, reservoir, or waterway obstruction? | _____ | <u>X</u> | _____ |
| 16. Will the action change the overland flow of stormwater or reduce the absorption capacity of the ground? | _____ | <u>X</u> | _____ |
| 17. Will the action require a permit for the drilling of a water well? | _____ | <u>X</u> | _____ |
| 18. Will the action require a permit for water appropriation? | _____ | <u>X</u> | _____ |
| 19. Will the action require a permit for the construction and operation of facilities for treatment or distribution of water? | _____ | <u>X</u> | _____ |
| 20. Will the project require a permit for the construction and operation of facilities for sewage treatment and/or land disposal of liquid waste derivatives? | _____ | <u>X</u> | _____ |
| 21. Will the action result in any discharge into surface or sub-surface water? | _____ | <u>X</u> | _____ |

| | YES | NO | COMMENTS ATTACHED |
|---|---------------|---------------|-------------------|
| 22. If so, will the discharge affect ambient water quality parameters and/or require a discharge permit? | <u> </u> | <u> X </u> | <u> </u> |
| C. Air Use Considerations | | | |
| 23. Will the action result in any discharge into the air? | <u> X </u> | <u> </u> | <u> IV.D </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.E </u> |
| 26. Will the action preclude future use of related air space? | <u> </u> | <u> X </u> | <u> </u> |
| 27. Will the action generate any radiological, electrical, magnetic, or light influences? | <u> </u> | <u> X </u> | <u> </u> |
| D. Plants and Animals | | | |
| 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> |
| E. Socioeconomic | | | |
| 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.A </u> |

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| | YES | NO | COMMENTS ATTACHED |
|--|---------------|---------------|-------------------|
| 32. Will the action cause relocation of activities, structures, or result in a change in the population density of distribution? | <u>X</u> | <u> </u> | <u>IV.A</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>I.C</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> |
| 37. Is the action in accord with federal, state, regional and local comprehensive or functional plans - including zoning? | <u>X</u> | <u> </u> | <u>III.A.5</u> |
| 38. Will the action affect the employment opportunities for persons in the area? | <u> </u> | <u>X</u> | <u> </u> |
| 39. Will the action affect the ability of the area to attract new sources of tax revenue? | <u> </u> | <u>X</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> |
| F. Other Considerations | | | |
| 42. Could the action endanger the public health, safety, or welfare? | <u> </u> | <u>X</u> | <u> </u> |

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| | YES | NO | COMMENTS ATTACHED |
|--|-------|--------------|--|
| 43. Could the action be eliminated without deleterious affects to the public health, safety, welfare, or the natural environment? | _____ | <u> X </u> | _____ |
| 44. Will the action be of statewide significance? | _____ | <u> X </u> | _____ |
| 45. Are there any other plans or actions (Federal, State, County or private) that, in conjunction with the subject action, could result in a cumulative or synergistic impact on the public health, safety, welfare, or environment? | _____ | <u> X </u> | _____ |
| 46. Will the action require additional power generation or transmission capacity? | _____ | <u> X </u> | _____ |
| 47. This agency will develop a complete environmental effects report on the proposed action. | _____ | <u> X </u> | <u> This EIS satisfies the requirements of the National Environmental Policy Act and the MD Environmental Policy Act. </u> |

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I. PURPOSE AND NEED

I. PURPOSE AND NEED

A. PROJECT LOCATION AND DESCRIPTION

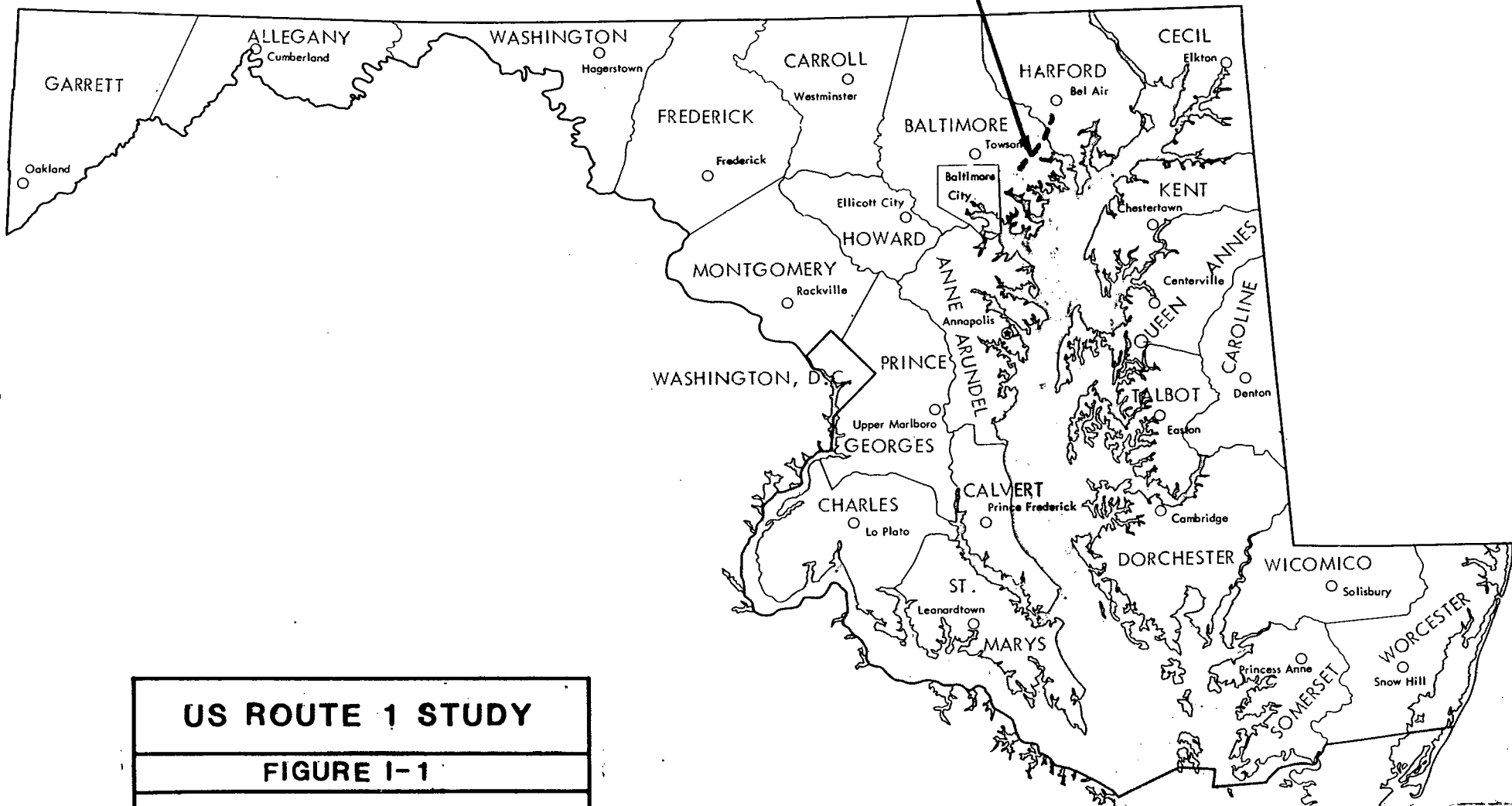
U.S. Route 1, one of the nation's oldest federal highways, extends along the east coast from Maine to Florida. Although Interstate 95 has replaced U.S. Route 1 as a major interstate facility, it continues to serve significant intrastate commercial and urban commuter traffic.

Located northeast of Baltimore (See Figure I-1), the U.S. Route 1 reconstruction project begins at Silver Spring Road in Baltimore County and ends at Maryland Route 152 in Harford County (See Figure I-2).

The existing facility consists of a four-lane, 44-foot roadway with 0 to 5 foot shoulders contained within an average 60-feet of right-of-way. There are signalized intersections at Silver Spring Road, Joppa Road/Ebenezer Road, the Joppa "T" intersection, Chapel Road/Baker Lane, Forge Road, Mount Vista Road, Sunshine Avenue/Bradshaw Road/Jerusalem Road and Mountain Road (MD Route 152). Several of these intersections are approaching capacity. U.S. Route 1 also suffers from inadequate geometrics at several locations; most notably at the Gunpowder Falls ("Big Gunpowder") and Little Gunpowder Falls ("Little Gunpowder") crossings.

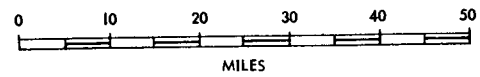
Silver Spring Road and Maryland Route 152 represent logical termini for this project since those major crossroads are the only connections from U.S. Route 1 to I-95 for approximately seven (7) miles. Silver Spring Road also provides access to Whitmarsh Mall - a regional shopping center located east of U.S. Route 1.

PROJECT LOCATION

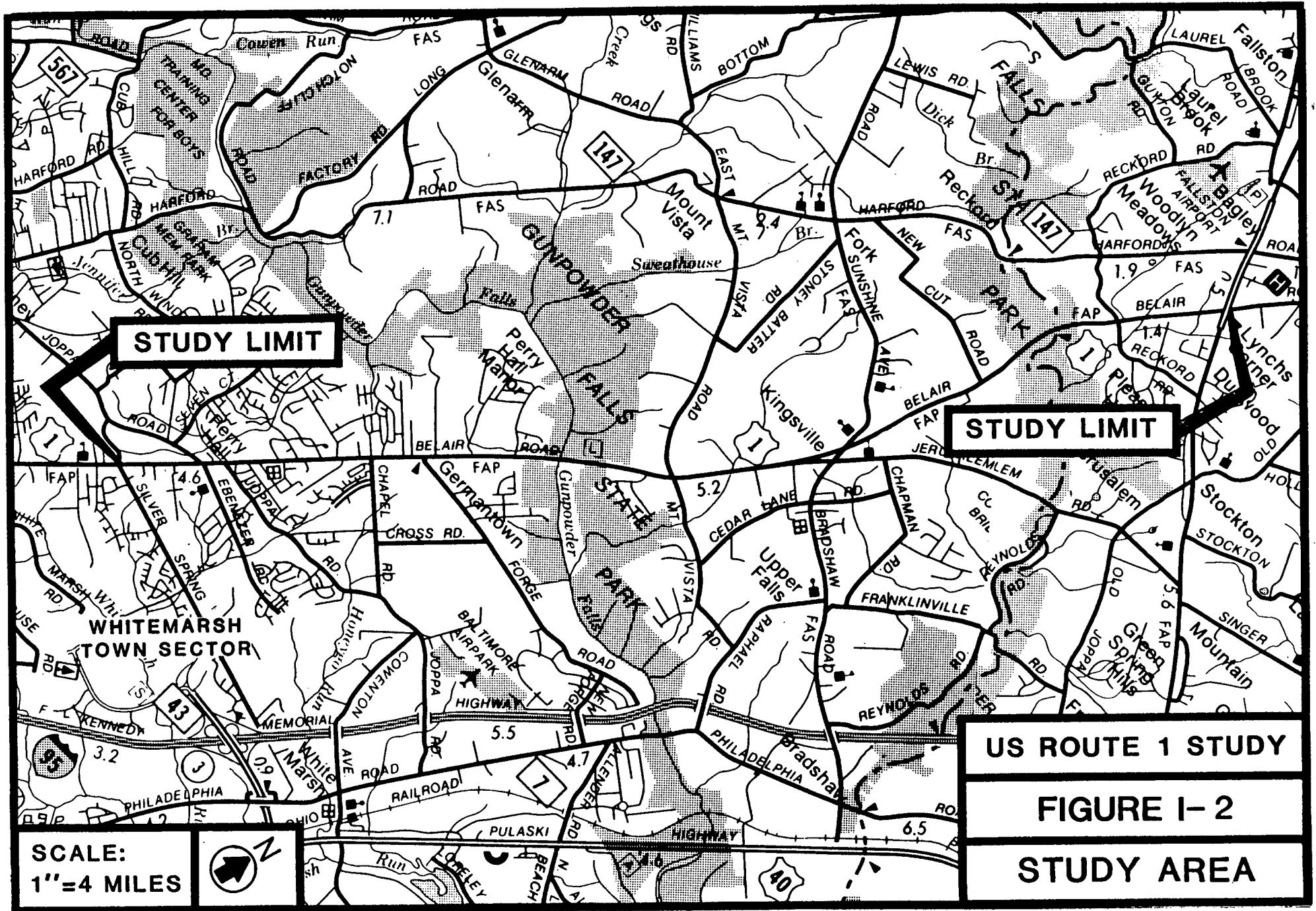


I-2

US ROUTE 1 STUDY
FIGURE I-1
LOCATION MAP



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Other portions of U.S. Route 1, outside the project area, are being improved or studied. The portion from the Baltimore Beltway (I-695) to Silver Spring Road is currently in final design. The typical section of this project (i.e., 6-lane urban section with turn lanes) is entirely compatible with the selected alternative. The U.S. Route 1 Business Study (MD Route 152 to MD Route 24), the U.S. Route 1/Hickory Study and the MD Route 152 Study (U.S. Route 1 to I-95) are currently in the project planning phase.

U.S. Route 1 is a busy four-lane, undivided highway that traces its origins back to the late 1700's. Back then, it was a turnpike known as Jerusalem Pike, a narrow dirt road through forests and farmlands that ended at Jerusalem Mills in Harford County. Carriage stops and taverns dotted the route. A toll house once sat near the intersection with Joppa Road. When the connection from Kingsville to Belair was made, the name was changed to Belair Road. As the automobile grew in popularity, improvements were made to provide for all weather use. A concrete pavement was constructed and modern bridges were built over the Big Gunpowder and Little Gunpowder Falls. In 1934, the roadway was widened to 4 lanes. That roadway, with few exceptions, is that over which up to 31,000 motorists now travel daily. By the year 2015, that number is expected to increase to between 39,000 and 60,000.

The reason for nearly 100% projected increase in traffic over the next twenty years is two-fold. First, Baltimore County has designated the Whitemarsh Town Sector (located just east of the study corridor) as one of three major growth areas within the County. The area is already growing at a rapid rate. The 7 year old, 150 acre Whitemarsh Mall, which is the focal point of the development, enjoyed almost immediate success. When completed, the new town center will have added over forty thousand residences, as well as over 200 acres of light industrial development. The trip generation rates and the impact on the area roads will be enormous.

The second reason for the dramatic increase is that Belair Road provides a direct link to the communities of Kingsville, Fork, Benson, Fallston, Bel Air, Forest Hill, Hickory, and Churchville. This area of Harford County is also growing at an increased rate. Since the extension of Perring Parkway to Harford County was dropped and since Harford Road (a parallel facility) is a narrow, winding two lane road, the logical choice for many motorists is Belair Road, especially for those bound for Towson.

Further compounding the problem today is that there are no parallel routes in the Whitemarsh/Perry Hall area to accommodate local trips. Walther Boulevard no longer is planned to connect to the existing portion inside of the Beltway. Perry Hall Boulevard north of Ebenezer has been dropped by Baltimore County, while Honeygo Boulevard and Proctor Lane are currently just a few short pieces of roadway built by area developers (See Section III.A.6).

B. THE CORRIDOR TODAY

From Silver Spring Road to just north of Forge Road, the corridor can be described as a rapidly growing, urbanized area. Townhouses, single family homes, shopping centers, and small office buildings are being built everywhere. Developers cannot keep up with the demand. This development will eventually envelop the older communities along the route. The portion of Belair Road between Joppa Road and Chapel Lane is relatively picturesque in nature with large canopied red oak trees over the roadway. These trees have become a Perry Hall landmark. Also in the same general area is the newly constructed Perry Hall Fire Station and C&P's regional telephone exchange.

The Joppa Road/Ebenezer Road intersection has been improved several times in the past decade. Lane configurations have

been revised, existing channelization has been removed, and new signalization has been installed. Numerous changes have been made to the signal timing. Each change resulted in a certain level of improvement, but the demand continues to outstrip the capacity of the intersection. Any further improvement will result in substantial impacts to the area businesses.

The Baker Lane/Chapel Road intersection generally appears to operate at an acceptable level of service. However, the sharp radius in the southeast quadrant makes it most difficult for public transit buses turning onto Chapel Road, and during P.M. rush hour this can create substantial delays.

North of Forge Road, the nature of the corridor changes. The planned Gunpowder Sanitary Sewer Outfall, designed to serve the northern portion of Perry Hall, is at least five years off and public water and sewer is not planned to cross the Big Gunpowder Falls. The Baltimore County Growth Management Plan designates that development north of the Big Gunpowder Falls be low density - minimum of 2 acres per dwelling unit. Much of it is set aside as rural conservation districts with a minimum of 5 acres per dwelling unit.

The corridor crosses the Gunpowder Falls State Park, a linear park system that runs from the Chesapeake Bay to northwestern Baltimore County. This portion of the park is set aside for passive recreational uses. There are many hiking and equestrian trails and the U.S. Route 1 bridge is used by many as the starting point for canoeing and rafting trips. The terminus of these water trips is the Philadelphia Road bridge, approximately 3 miles downstream.

The segment from Perry Hall to Mt. Vista Road has received much attention in recent years because of its high incidence of severe and often times fatal accidents. This portion of

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the roadway is winding and as a result has less than desirable horizontal sight distances and substandard super-elevation. There are no shoulders and the segment is characterized by steep slopes on the east side and a stream bed tight against the west side. The roadway width is substandard and drainage is a problem. Several years ago, the State Highway Administration undertook a major effort to improve safety in this area. A left turn lane was installed at Perry Hall Road, the pavement was roughened to reduce skidding, long mast lighting was installed, and reflectors were placed along the centerline. These improvements have helped substantially, but still there remains the potential for head-on collisions, a situation that calls for realignment of the roadway to improve the horizontal geometry and construction of a center median. Finally, at the Mt. Vista Road intersection, the vertical sight distance on U.S. Route 1 is sub-standard and flashing overhead lights have been installed to warn northbound motorists of the signal.

Perhaps the biggest concern in the improvement of U.S. Route 1 may be the Sunshine Avenue/Bradshaw Road intersection at Kingsville. This community dates back to the early 1800's. Saint John's Parish Church, which was constructed in 1817, lies immediately adjacent to both U.S. Route 1 and Bradshaw Road. Many of the residential and commercial structures in Kingsville lie close to the roadway. The Bradshaw Road/Sunshine Avenue/U.S. Route 1 intersection is extremely skewed and the northern approach of U.S. Route 1 has been roughened to improve skid resistance of the downhill grade.

Another concern in the Kingsville area is the "Y" connection of U.S. Route 1 and Jerusalem Road. This connection is used by many to avoid the signal delay and the skewed intersection of Bradshaw Road with U.S. Route 1. There is a high potential for head-on collisions with vehicles northbound on

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U.S. Route 1, as well as for side swipe accidents with southbound vehicles.

North of Kingsville, the geometrics of U.S. Route 1 are reasonably good until it begins to approach the Little Gunpowder Falls. New Cut Road, as the name implies, lies in a deep cut and as a consequence has less than desirable sight distance from U.S. Route 1. North of New Cut Road, the combination of the steep grade, deteriorating pavement, and substandard superelevation create a major safety problem. This situation is further exacerbated by a popular tavern where parking is immediately adjacent to and perpendicular to U.S. Route 1.

The crossing of the Little Gunpowder denotes the change from Baltimore County to Harford County. This river and adjacent land is also part of the Gunpowder Falls State Park and is also used for passive recreation activities. Just north of the river, U.S. Route 1 rises and curves sharply to the east. The roadway has been cut back into the rock, and rock catch nets have been constructed. From Reckord Road to MD Route 152 (Mountain Road), the area is generally characterized by scattered commercial development - restaurants, motels, used car lots, auto repair, etc. The roadway geometrics are generally good in this area.

The northern terminus of the project is MD Route 152. (See discussion on logical termini on p. I-1.) This intersection has service stations on two of the corners and a shopping center on the third. The last quadrant is residential, but is zoned commercial.

The entire route, from Silver Spring Road to MD Route 152 has large utility poles which carry high voltage electric lines serving the Belair Road corridor. There are two electric substations, one in Perry Hall across from Forge Road, and

another in Kingsville, adjacent to the Lassahn funeral home. In addition, a major overhead AT&T trunk line runs the length of the corridor. Since this line is part of the Washington/Moscow Hotline land link, it cannot be interrupted during relocation.

The roadway has two major structures, one over the Big Gunpowder Falls and one over the Little Gunpowder Falls. These structures are both showing signs of age, having originally been two lane structures that were widened to four lanes over 50 years ago. The bridge over the Big Gunpowder was topped by floodwaters of Hurricane Agnes (1972) and both approach embankments were washed away. The parapets of the Big Gunpowder structure have also been severely damaged by age as well as vehicular accidents. Inadequate sight distance and lack of separation of opposing traffic has contributed to a high accident rate at this location. As a result, SHA is considering advancing the bridge replacement at the Big Gunpowder as a separate project.

C. TRAFFIC AND SAFETY CONSIDERATIONS

Traffic volumes will continue to increase along U.S. Route 1 (Belair Road), more than doubling along some sections of U.S. Route 1 by the design year of 2015. Table I-1 summarizes the volume forecasts.

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TABLE I-1

2015 Volume Forecasts U.S. Route 1 (Belair Road)

| Location | Average Daily Traffic 1986 | Average Daily Traffic 2015 |
|-------------------------------------|-------------------------------|-------------------------------|
| I-695 to Silver Spring Road | 29,000 | 65,000 |
| Silver Spring Road to Ebenezer Road | 26,000 | 53,000 |
| Ebenezer Road to Joppa Road | 31,000 | 60,000 |
| Joppa Road to Chapel Road | 28,000 | 52,000 |
| Chapel Road to Forge Road | 25,000 | 45,000 |
| Forge Road to Mt. Vista Road | 21,000 | 43,000 |
| Mt. Vista Road to Reckord Road | 17,000 | 39,000 |
| Reckord Road to MD 152 | 17,000 | 30,000 |
| North of MD 152 | 26,000 | 58,000 |

Such volume increases will cause the operating characteristics of the corridor to rapidly deteriorate. Two key factors were analyzed to quantify the impacts of the traffic growth - accident history and roadway capacity.

The accident history within the study area indicates roadway improvements are needed. Table I-2 summarizes the accident experience within the corridor for the years 1985 through 1987.

TABLE I-2

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Accident Summary U.S. Route 1
from Silver Spring Road to MD 152

| <u>Accident Type</u> | <u>3 Year Total (1985-1987)</u> |
|-------------------------------|---------------------------------|
| Fatal Accident | 7 |
| Number of Fatalities | 7 |
| Injury Accident | 394 |
| Number Injured | 714 |
| Property Damage Only Accident | 278 |
| Total Number of Accidents | 679 |

New York Transportation Safety Numbers (NYTSN) are used to quantify the costs to the public of traffic accidents. The NYTSN assign dollar unit costs to the three types of accidents as follows:

- Fatal Accidents (per fatality): urban \$301,391
rural \$391,462
- Injury Accident (per injury): urban \$ 11,255
rural \$ 8,151
- Property Damage Only (each): urban \$ 2,199
rural \$ 1,290

Based on these figures, the average annual accident cost (AAAC) within the corridor is approximately \$3.6 million per year.

The average accident rate per 100 MVM on U.S. Route 1 between Silver Spring Road and MD 152, for the three year study period, was 271 accidents per 100 MVM versus the Statewide average of 390 accidents per 100 MVM. Based on this comparison, the accident experience in the corridor might not

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seem severe. However, a substantial portion of the study area is in an open section with few conflict points; therefore, the overall accident rate is low. However, examination of the individual intersection and mid-block accident rates confirms the fact that the accident experience along some sections of U.S. Route 1 is worse than the macroscopic view indicates. Table I-3 lists the five intersections which have been identified as high accident intersections.

TABLE I-3

**High Accident Locations
Intersection Accidents**

| Intersection | 1985 | Year | 1987 |
|----------------------------|--------------------|-------------|--------------------|
| U.S. Route 1 @ | # Accidents | 1986 | # Accidents |
| Silver Spring Road | 13 | N/A | 17 |
| Joppa Road/Ebenezer | 12 | 16 | 12 |
| Chapel Road/Baker Lane | 11 | 11 | N/A |
| Bradshaw Rd./Sunshine Ave. | 11 | N/A | 11 |
| MD Rte. 152 | 37 | 30 | 15 |

Two high accident sections were identified within the corridor and are summarized in Table I-4.

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TABLE I-4
High Accident Locations
Mid-Block Accidents

| Location U.S. Route 1 Between | 1985 # Accidents | Year 1986 # Accidents | 1987 # Accidents |
|-------------------------------------|---------------------|-----------------------------|---------------------|
| Perry View Road & Forge Road | N/A | 37 | N/A |
| Wilgis Road & Nilles Road | 37 | 40 | 29 |

In addition to the two high accident sections, two other roadway segments are experiencing an average annual accident rate substantially higher than the statewide average.

The first section is from Silver Spring Road to Joppa Road. This section experienced an average annual accident rate of 504 accidents per 100 MVM, substantially higher than the statewide average of 377 accidents per 100 MVM for roadways of similar character. Intersections accounted for 61% of the accidents in this section.

The second section is from the Baltimore/Harford County Line to MD Route 152. The average accident rate in this section is 588 accidents per 100 MVM, well above the statewide average of 360 accidents per 100 MVM for similar roadways. Angle, Rear end, fixed object, left turn, and nighttime accidents were substantially above statewide averages.

The existing conditions of the section of U.S. Route 1 from Miller Road to Sheradale Drive (which includes the bridge at Big Gunpowder Falls) has a higher accident rate than the statewide average.

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The opposite direction rate in this section was 60% higher (29.1 versus 17.96 per 100 million vehicle miles - 100/mvm) than the statewide rate from 1985 through 1987.

In addition, the rate for nighttime accidents was one-third higher than the statewide rate for this type of accident from 1985 through 1987 (47 versus 35.68 per 100 mvm). Also, the wet surface accidents rate was 26% higher than the statewide rate (35 versus 26.39 100/mvm).

Over the past few years, the State Highway Administration has attempted to improve the traffic safety in this area with maintenance projects, such as reflector lights in the pavement, guard rail, pavement roughening and overhead lighting. These projects have helped somewhat to improve traffic safety; however, improved horizontal and vertical alignments in addition to opposing traffic separation will be required to reduce the severe accident rate at the Big Gunpowder location.

Increased traffic congestion will only aggravate the accident problem within the corridor.

Level of Service computations were performed based on projected year 2015 peak hour volumes; the volumes are summarized in Table I-5.

TABLE I-5
2015 Projected Traffic Volumes - Peak Direction

| <u>Location</u> | <u>Volume</u> |
|---|---------------|
| South of Silver Spring Road | 3500 |
| North of Silver Spring Road | 3500 |
| South of Joppa Road/Ebenezer Road | 2725 |
| North of Joppa Road/Ebenezer Road | 3375 |
| South of Joppa "T" | 3300 |
| North of Joppa "T" | 3175 |
| South of Chapel Road/Baker Lane | 2125 |
| North of Chapel Road/Baker Lane | 2100 |
| South of Forge Road | 2175 |
| North of Forge Road | 2100 |
| South of Honeygo Boulevard/Gunview Road | 2150 |
| North of Honeygo Boulevard/Gunview Road | 2500 |
| South of Mt. Vista Road | 1800 |
| North of Mt. Vista Road | 1725 |
| South of Sunshine Avenue/Bradshaw Road | 1825 |
| North of Sunshine Avenue/Bradshaw Road | 1725 |
| South of MD 152 | 2300 |
| North of MD 152 | 3525 |

The traffic volume data from Table I-5 was used along with the proposed roadway cross-sections and geometrics to determine the level of service along U.S. Route 1. The Level of Service concept provides a means by which the operating characteristics of a roadway or an intersection can be quantified. Letter grades of 'A' through 'F' are assigned to the location under analysis based on the anticipated traffic volumes versus the maximum number of vehicles the facility could accommodate. Level of Service 'A' indicates that a facility is operating quite well with minimal delays, Level

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of Service 'D' indicates that delays and congestion are at the maximum acceptable level. A Level of Service below 'D' indicates that operating conditions are unacceptable and that improvements to increase capacity are warranted.

The mid-block Levels of Service for the No Build and Six-Lane Build Alternates are summarized in Table I-6.

TABLE I-6

Mid-Block Level of Service Summary

| Section | | No Build L.O.S. AM/PM | 4-Lane L.O.S. AM/PM | 6-Lane L.O.S. AM/PM |
|---------------------------------------|----------|-----------------------------|---------------------------|---------------------------|
| Joppa 'T' to Perry Hall Road | NB SB | C/F F/D | C/F F/C | B/D D/B |
| Perry Hall Road to Sheradale Drive | NB SB | D/F F/E | C/E E/D | B/C C/B |
| Sheradale Drive to New Cut Road | NB SB | B/E D/B | B/D C/B | A/B B/A |
| New Cut Road to Reckord Road | NB SB | B/F E/E | B/E D/D | A/C B/B |
| Reckord Road to MD 152 | NB SB | B/F C/E | B/E C/C | A/D B/B |

Examination of Table I-6 reveals that all roadway segments would function at an unacceptable Level of Service, L.O.S. 'E' or below, in the design year with the No Build Alternate.

The high traffic volumes projected for the developed portions of the study area require a six-lane section to provide sufficient capacity. Although projected traffic volumes are lower through the Big and Little Gunpowder State Park areas, the steep grades of over five percent reduce the available capacity and justify a six-lane section.

Several key intersections were also analyzed based on a No Build and Build Alternate. The intersections analyzed and the corresponding levels of service are summarized in Table I-7.

TABLE I-7
Intersection Level of Service Summary

| U.S. Route 1 @ | No Build L.O.S. AM/PM | 4-Lane L.O.S. AM/PM | 6-Lane L.O.S. AM/PM |
|-----------------------------|-----------------------------|---------------------------|---------------------------|
| Silver Spring Road | F/F | F/F | F/F |
| Joppa Road/Ebenezer Road | F/F | F/F | E/F |
| Joppa "T" | F/F | F/F | C/D |
| (1) Joppa Road/India Ave. | NA/NA | NA | C/D |
| Chapel Road/Baker Lane | F/F | D/E | C/D |
| Forge Road | C/E | C/C | A/B |
| Honeygo Blvd./Gunview Blvd. | NA/NA | E/E | C/D |
| Mt. Vista Road | B/C | A/B | A/A |
| Sunshine Ave./Bradshaw Road | F/F | E/E | C/D |
| MD Route 152 | F/F | D/F | C/F |

(1) Assumes realignment of offset T's to provide one four-legged intersection.

The data presented in Table I-7 indicates that some intersections would still be operating at an unacceptable level of service with the Six-Lane Alternate; however, such factors as excessive residential and business relocation and community opposition prohibit any additional roadway widening in those areas. Only the Mt. Vista Road intersection would function at an acceptable level of service in the design year with no improvements, thus indicating intersection improvements are warranted within the corridor.

II. ALTERNATIVES

II. ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. STAGE I ALTERNATES PRESENTED AT THE ALTERNATES PUBLIC MEETING
APRIL 28 AND 30, 1987

The following preliminary alternates were presented at the Alternates Public Meeting. These alternates were revised during the detailed studies in Stage II of the project. The revised alternates are described beginning at Section II-B.

No Build Alternate

No major improvements would be made to the existing roadway. Normal maintenance would continue and spot safety improvements would be undertaken where feasible. In addition, no residential or commercial displacements would be required. The No Build Alternate, however, would not provide any improvement in traffic safety or capacity. This will result in increased congestion and accidents as traffic volumes increase.

Build Alternates

Two basic build alternates, a Six-Lane Alternate and a Four-Lane Alternate, were developed for the reconstruction of U.S. Route 1. The proposed build alternates generally followed the existing horizontal alignment, with widening on one or both sides depending upon physical constraints. Where possible, consideration was given to modifying the rolling nature and steep grades on the existing road.

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Six-Lane Alternate

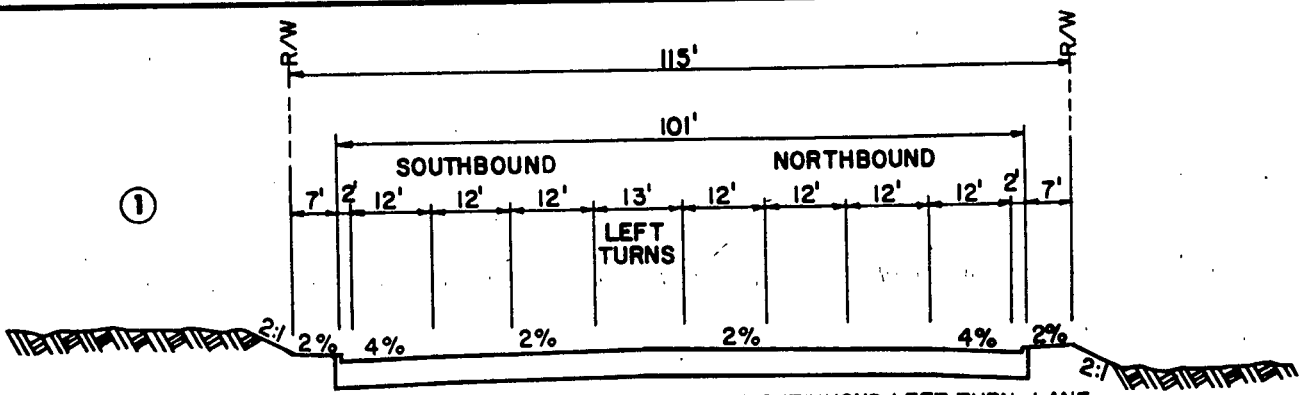
The Six-Lane Alternate (as discussed at the Alternates Public Meeting) provided a minimum of six through lanes from Silver Spring Road to Maryland Route 152. The typical cross section varied from segment to segment depending upon capacity requirements and adjacent land use. In an effort to reduce right-of-way taking, all typical sections used curb and gutter for storm drainage, rather than side ditches.

From Silver Spring Road to Joppa Road East, the roadway consisted of 3 southbound lanes, 4 northbound lanes and a continuous center turning lane (See Figure II-1 Typical Section 1). The traffic capacity analysis determined that this segment required seven through lanes to operate adequately in the design year.

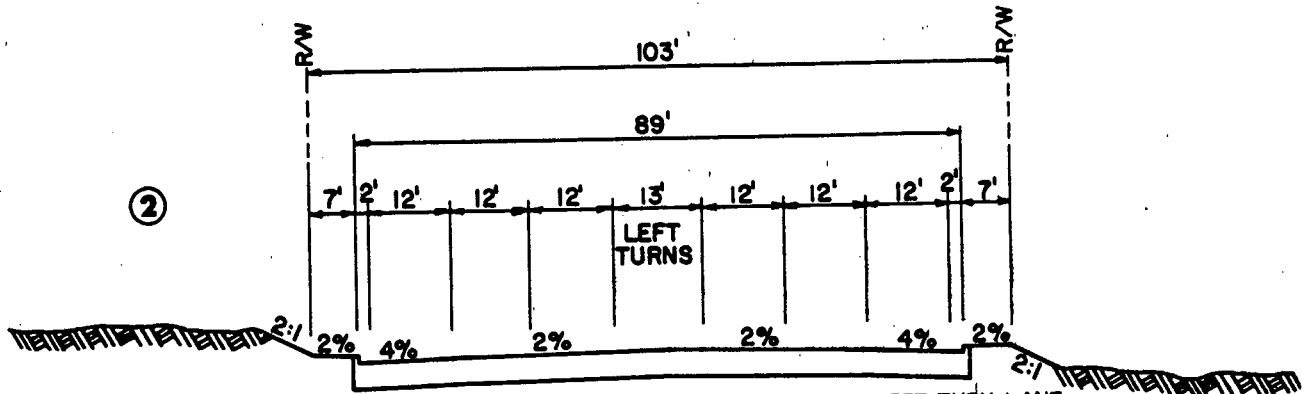
From Joppa Road East to Perry Hall Road, the roadway provided three lanes in each direction with a continuous center turning lane (See Figure II-1 Typical Section 2). The center turn lane was provided in the southern portion of the corridor due to the densely developed residential and commercial land use.

The third segment of the Six-Lane Alternate extended from Perry Hall Road to south of Sheradale Drive. This roadway segment consisted of three lanes in each direction with a "Jersey" median barrier (See Figure II-1 Typical Section 3). In order to reduce impacts to Gunpowder Falls State Park, the widths of the median and shoulders were reduced from those considered desirable.

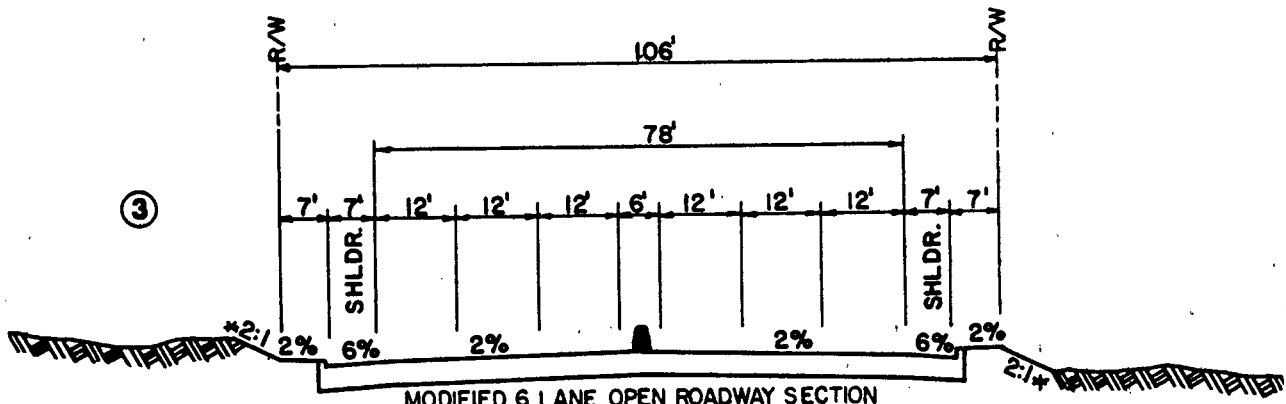
From south of Sheradale Drive to New Cut Road, the roadway consisted of three lanes in each direction with a 16 foot



①
 CLOSED 7 LANE URBAN STREET SECTION W/CONTINUOUS LEFT TURN LANE
 " 4 & 6 LANE ALTERNATES"
 SILVER SPRING RD. TO JOPPA RD. EAST



②
 CLOSED 6 LANE URBAN STREET SECTION W/CONTINUOUS LEFT TURN LANE
 " 6 LANE ALTERNATE "
 JOPPA RD. EAST TO PERRY HALL RD.



③
 MODIFIED 6 LANE OPEN ROADWAY SECTION
 W/ JERSEY MEDIAN BARRIER
 " 6 LANE ALTERNATE "
 PERRY HALL RD. TO SOUTH OF SHERADALE RD.
 NEW CUT RD. TO SOUTH OF RECKORD RD.

Figure II-1

U.S.ROUTE 1
Silver Spring Road to Maryland Rt. 152
Alternates Public Meeting
TYPICAL SECTIONS

THE DIMENSIONS SHOWN ARE FOR THE PURPOSE OF DETERMINING COST ESTIMATES AND ENVIRONMENTAL IMPACTS, AND ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PHASE.

raised median (See Figure II-2 Typical Section 4). The closed median area was selected to enhance traffic safety.

From New Cut Road to south of Reckord Road, the roadway again used the "Jersey" median (Figure II-1 Typical Section 3) as it crosses the Gunpowder Falls State Park.

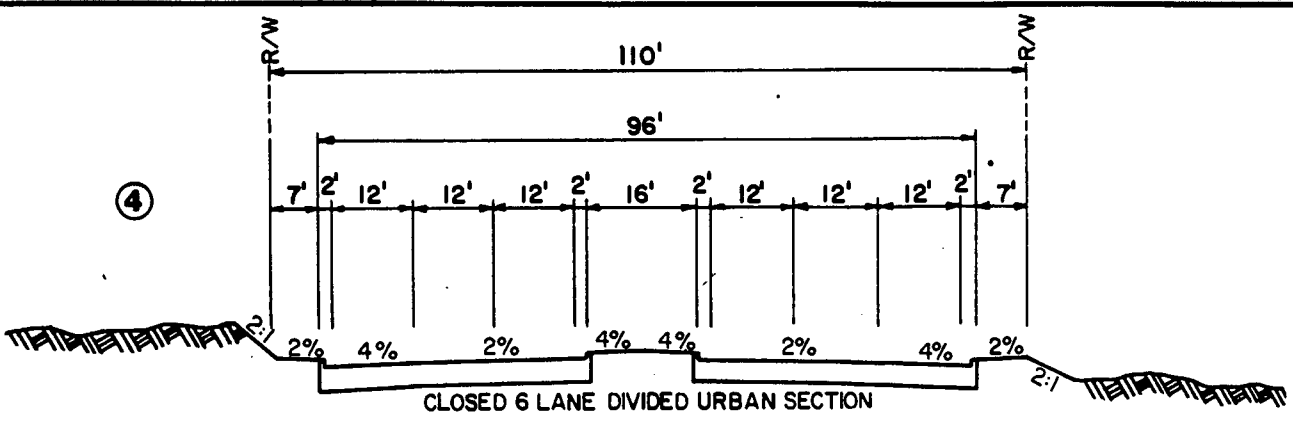
The remaining section from the south of Reckord Road to Maryland 152 will consist of three lanes in each direction with a 16 foot raised median (See Figure II-2 Typical Section 4).

Under the Six-Lane Alternate, future capacity needs would be satisfied, thereby reducing congestion. In those areas provided closed medians (Perry Hall Road to Maryland Route 152), left turn movements would be controlled and either a barrier or a raised median to separate opposing traffic would be provided. Both these improvements would enhance traffic safety.

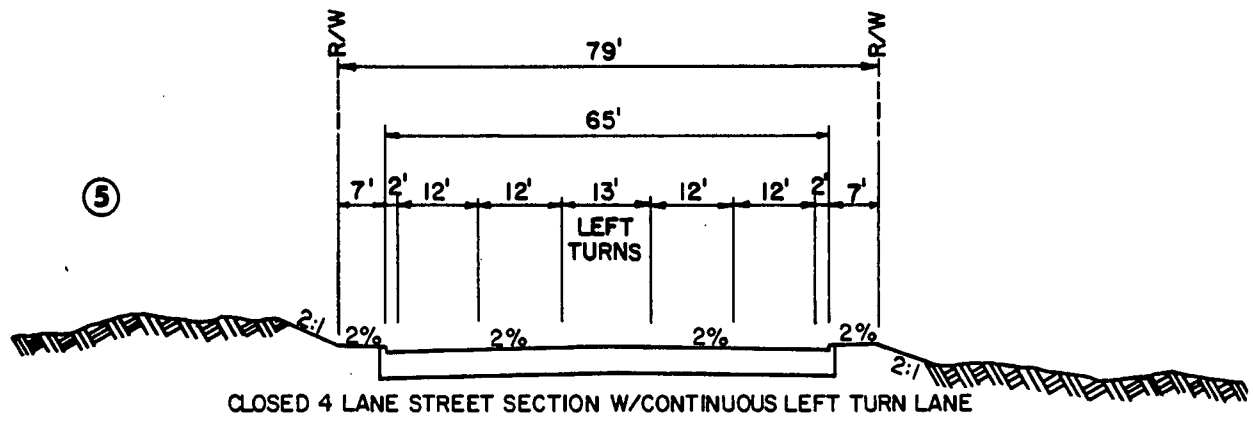
Four-Lane Alternate

The Four-Lane Alternate was developed in an attempt to reduce the number of residential and business relocations associated with the Six-Lane Alternate. Similar to the Six-Lane Alternate, the typical cross-section of the Four-Lane Alternate varied from segment to segment depending upon capacity requirements and adjacent land use, and used curb and gutter throughout to control storm drainage.

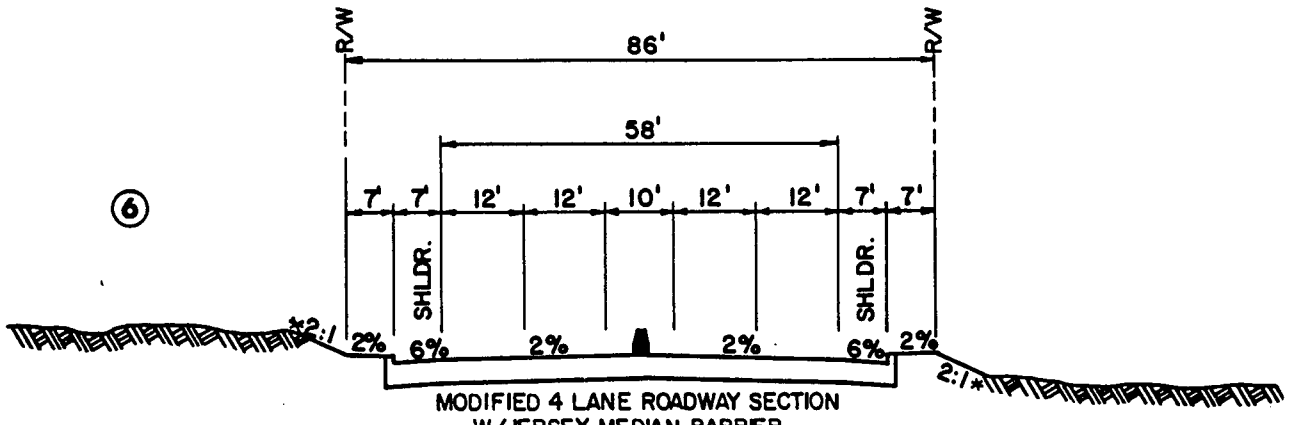
From Silver Spring Road to Joppa Road East, the roadway, like the Six-Lane Alternate, consisted of 3 southbound lanes, 4 northbound lanes and a continuous center turning lane (See Figure II-1 Typical Section 1). The traffic capacity analysis determined that this segment required seven through lanes to operate adequately in the design year.



CLOSED 6 LANE DIVIDED URBAN SECTION
 " 6 LANE ALTERNATE "
 SOUTH OF SHERADALE RD. TO NEW CUT RD.
 SOUTH OF RECKORD RD. TO MD 152



CLOSED 4 LANE STREET SECTION W/CONTINUOUS LEFT TURN LANE
 " 4 LANE ALTERNATE "
 JOPPA RD. EAST TO PERRY HALL RD.
 SOUTH OF SHERADALE RD. TO NEW CUT RD.
 SOUTH OF RECKORD RD. TO MD 152



MODIFIED 4 LANE ROADWAY SECTION
 W/JERSEY MEDIAN BARRIER
 " 4 LANE ALTERNATE "
 PERRY HALL RD. TO SHERADALE RD.
 NEW CUT RD. TO SOUTH OF RECKORD RD.

Figure II-2

THE DIMENSIONS SHOWN ARE FOR THE PURPOSE OF DETERMINING COST ESTIMATES AND ENVIRONMENTAL IMPACTS, AND ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PHASE.

U.S.ROUTE 1
 Silver Spring Road to Maryland Rt. 152
 Alternates Public Meeting
TYPICAL SECTIONS CONT'D

From Joppa Road East to Perry Hall Road, the roadway consisted of two lanes in each direction with a continuous center turning lane (See Figure II-2 Typical Section 5).

The third segment of the Four-Lane Alternate extended from Perry Hall Road through Gunpowder State Park to south of Sheradale Drive. This roadway segment consisted of two lanes in each direction with a "Jersey" median barrier (See Figure II-2 Typical Section 6).

From south of Sheradale Drive to New Cut road, the typical section reverted back to the center turn lane section (See Figure II-2 Typical Section 5).

From New Cut Road to south of Reckord Road, the typical section once again used the Jersey Barrier in the median, due to the need to minimize right-of-way taking thru the Park (See Figure II-2 Typical Section 6).

The remaining section from south of Reckord Road to Maryland Route 152 consisted of two lanes in each direction with a continuous center turn lane (See Figure II-2 Typical Section 5).

In order to provide for "U-Turn" movements resulting from median closings, "jug handle" type roadways were proposed at four locations.

Intersection Improvements

In addition to the mainline widening improvement discussed above, major redesign was proposed at several intersections to improve traffic flow. In addition, three Kingsville Options (A, B & C) were presented.

Kingsville Option 'A' was designed to split the Jerusalem Road/Bradshaw Road/Sunshine Avenue intersection into two 90 degree intersections (See Figure II-3). Option 'B' was designed to combine the intersections into one intersection near the old Kingsville Pharmacy (See Figure II-16). Option 'B' was carried into the detailed study phase. Kingsville Option 'C' was also designed to combine the intersections, but the new intersection was located just south of the Kingsville Motors property (See Figure II-4).

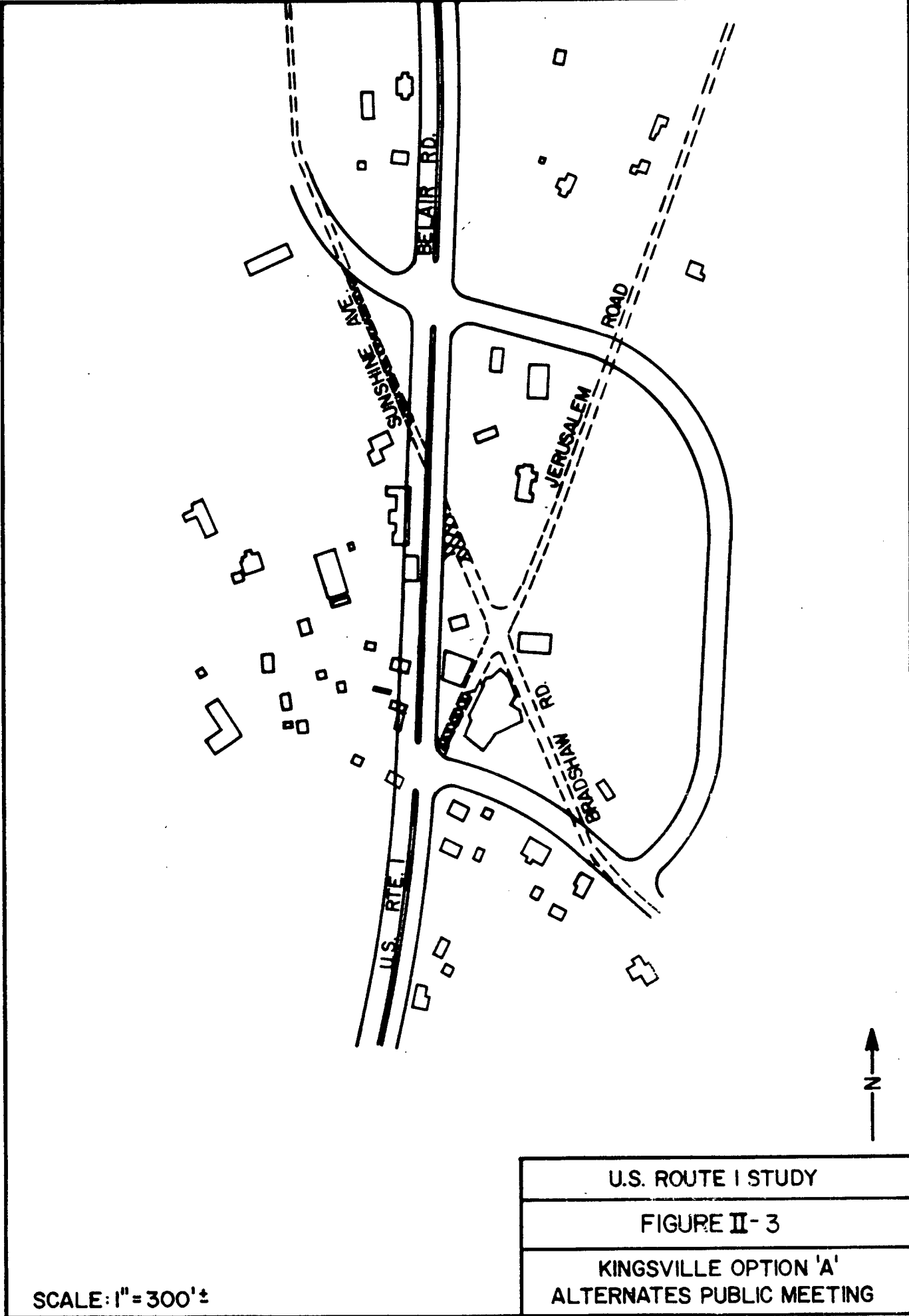
B. ALTERNATES SELECTED FOR DETAILED STUDY

Following a careful review of the comments received from the public and concerned agencies as well as the preliminary engineering and environmental data developed in Stage I of the project, the project planning team determined that the Four-Lane, Six-Lane, and No Build Alternates should be studied in detail in Stage II of the project. (It was recognized, however, that the Four-Lane and No Build Alternates would not provide the capacity needed throughout the entire corridor). The following modifications were made to the Stage I alternates:

Six-Lane Modified Alternate (Selected Alternate)

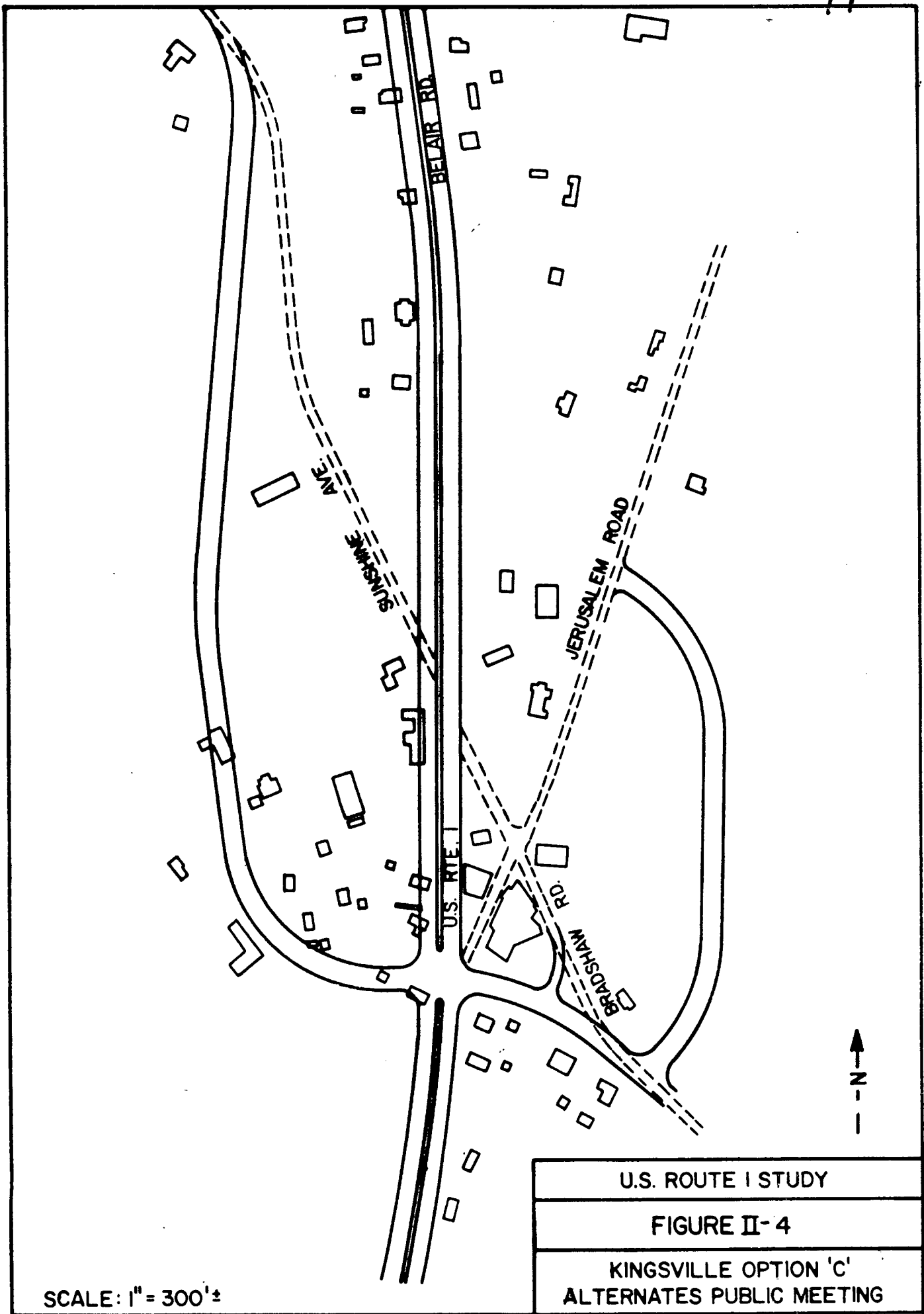
The Six-Lane Alternate presented at the Alternates Public Meeting has been modified to reduce impacts.

As discussed previously, the section of the corridor between Silver Spring Road and Forge Road is a rapidly growing, urbanized area. The original Six-Lane Alternate proposed seven (7) lanes between Silver Spring Road and Joppa Road East. This additional northbound lane, however, was removed from the Six-Lane Alternate due to excessive residential and business relocations.



SCALE: 1" = 300' ±

| |
|--|
| U.S. ROUTE 1 STUDY |
| FIGURE II-3 |
| KINGSVILLE OPTION 'A' ALTERNATES PUBLIC MEETING |



SCALE: 1" = 300' ±

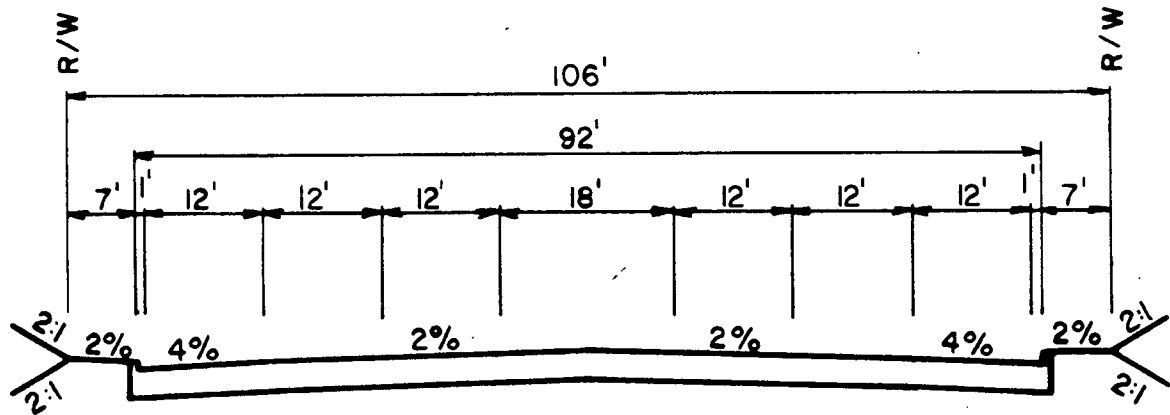
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| U.S. ROUTE 1 STUDY |
| FIGURE II-4 |
| KINGSVILLE OPTION 'C' ALTERNATES PUBLIC MEETING |

The continuous left turn lane originally proposed for the Silver Spring Road to Perry Hall Road segment has been dropped in favor of raised medians with crossovers (left turn slots) in selected locations (See Figure II-5). The continuous left turn lane was viewed by many as an unsafe situation for both motorists and pedestrians, especially with the need to cross three full lanes of traffic. The crossover locations were carefully located to meet the needs of the community. Their locations and intervals were selected to minimize adverse travel, to provide direct access to community facilities, such as schools, the firehouse, churches, etc., and to provide access to major traffic generators.

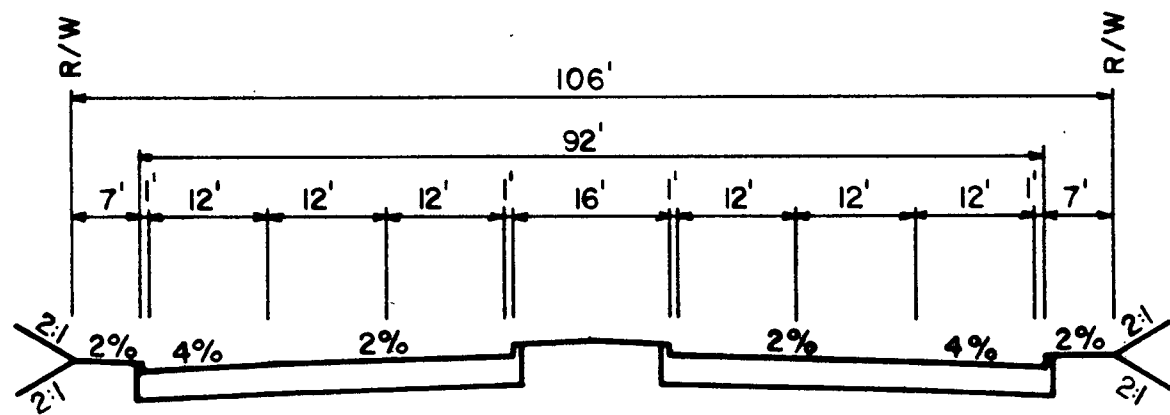
There still remained, however, several short areas where continuous left turn lanes would be required due to concentrated roadside development. The continuous left turn lane is provided in the vicinity of Perry Hall Presbyterian Church, in the vicinity of the County fire station and in the section from the Northview Shopping Center to north of Forge Road (See Figures II-9 & II-10).

At the Joppa Road intersection, a narrow raised concrete median will be provided to reduce traffic congestion resulting from vehicles entering and leaving driveways near the U.S. Route 1 intersection. There is also a provision for a special crossover at the Perry Hall Elementary School to allow for school buses to enter the main driveway. This opening would be signed for school buses only and northbound traffic would be prohibited from turning into Brookfield Road (See Figure II-9).

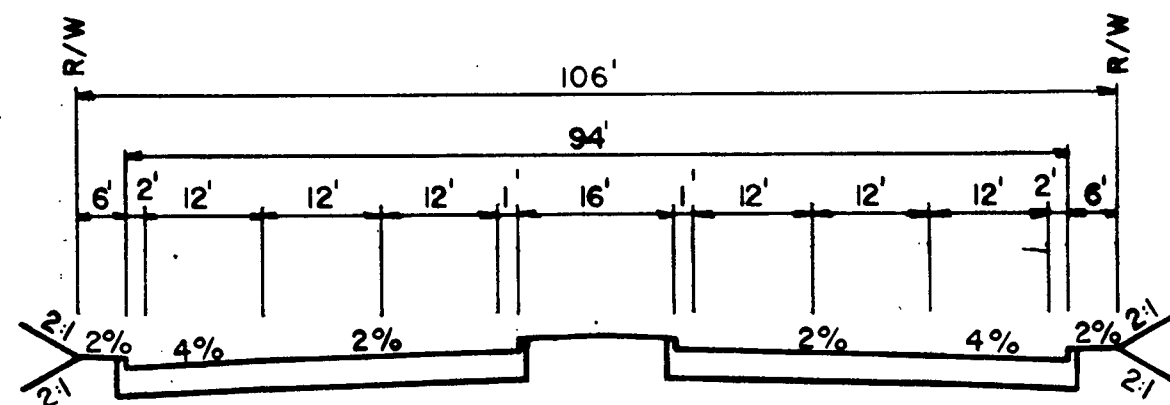
Traffic projections indicate the need for several additional lanes at Ebenezer Road. The initial construction, however, will provide for the ultimate right-of-way acquisition but



6 LANE URBAN ROADWAY SECTION
W/CONTINUOUS LEFT TURN



6 LANE URBAN ROADWAY SECTION
W/GRASS MEDIAN



6 LANE RURAL ROADWAY SECTION
W/GRASS MEDIAN

THE DIMENSIONS SHOWN ARE FOR THE PURPOSE OF DETERMINING COST ESTIMATES AND ENVIRONMENTAL IMPACTS, AND ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PHASE.

US ROUTE 1

Silver Spring Rd To Maryland Route 152

Figure II-5
6 Lane Typical Sections

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will stage construction of the additional lanes on an as-needed basis. In addition, Joppa Road East will be realigned to function properly with India Avenue (See Figure II-9).

During the detailed study phase of this project, the Six-Lane alignment was shifted from south of Baker/Chapel to north of Forge Road to avoid the taking of the Grandstand Restaurant. This restaurant provides one of the only meeting rooms available in the community (See Figure II-10).

At the request of the Citizens Advisory Committee, a signal warrant study was conducted for the U.S. Route 1 - Glen Park Road Intersection. The study indicated that the intersection does not currently meet signal warrants.

From north of Forge Road to Maryland Route 152, the Six-Lane Alternate will use a 16-foot raised grass median to separate the northbound and southbound roadways. A median crossover will be provided at Perry Hall Road, Miller Road, two locations within the Big Gunpowder portion of Gunpowder State Park, Sheradale Drive, Mt. Vista Road, Cheryl Avenue, Goettner Road, New Cut Road, Reckord Road and Wilgus Road.

An additional crossover is being proposed at a location one-quarter mile south of New Cut Road. At this crossover, there is a provision for large vehicles, such as school buses or highway maintenance vehicles, to make U-turns. Since this crossover is so close to the one at New Cut Road, southbound traffic will be prohibited from making U-turns at New Cut Road.

The Maryland Route 152 intersection will receive interim improvements in the form of additional turning lanes. The ultimate configuration of this intersection will be determined by the ongoing Maryland Route 152 project planning study.

In the Kingsville area, three optional roadway configurations are proposed. These options are described following the Six-Lane Modified Alternate descriptions.

Four-Lane Alternate

The Four-Lane Alternate was modified to address many of the concerns raised by the Belair Road Citizens Advisory Committee (CAC). The Committee favored an improved four-lane U.S. Route 1 (in order to minimize right-of-way impacts) and preferred the continuous left turn concept through Perry Hall. As a result of several meetings between SHA and the Committee, a revised Four-Lane Alternate was developed. This Four-Lane "CAC" Alternate provided continuous left turn access for selected portions of U.S. Route 1 in Perry Hall area. These same access compromises apply to similar portions of the Modified Six-Lane Alternate as well.

The original Six-Lane Divided Alternate is shown on Figures II-6, II-7 and II-8. The Modified Six-Lane Divided Alternate is shown on Figures II-9 through II-15.

Kingsville Options

Three (3) options for the Kingsville area were studied in greater detail in Stage II - Options B, E Modified, and F. Option F is shown on Figure II-13. Option B is shown on Figure II-16. Option E Modified is shown on Figure II-17.

All three options eliminate the skewed intersection at U.S. 1/Bradshaw Road/Sunshine Avenue, and improve the vertical sight distance on U.S. Route 1. Option B realigns Bradshaw Road thru the Signet Bank, Kingsville Pharmacy, and King's Gas Station to Belair Road. Sunshine Avenue would be aligned directly across from Bradshaw Road and swing behind the Kingsville Post Office before tying into the existing

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roadway. Option E Modified shows Bradshaw Road realigned between the Key Motors Auto Dealer and the Bank and thru the Kingsville Pharmacy and Gas station properties to Belair Road. The Sunshine Avenue connection would be similar to Option B. Option F (selected alternate) would provide a one way pair system (3 lanes in each direction) to reduce impacts to the center of Kingsville. Northbound traffic would use existing Belair Road. The southbound roadway would bypass the center of Kingsville by swinging to the west just north of the Kings Court Motel and tie back onto existing alignment just north of the Lassahn Funeral Home.

The realignment of Bradshaw Road would be identical to that in Option E Modified. The connection to Sunshine Avenue would be made approximately 2100 feet to the north of the Bradshaw Road/U.S. Route 1 intersection.

Alternates Considered But Dropped

As a result of initial detailed study, the Four-Lane Alternate was dropped from further consideration. This alternate would fail to provide adequate overall capacity for the mainline and most intersections in the design year. High projected traffic volumes in the developed sections of the study area in addition to steep grades through Kingsville and the park areas create capacity demands which could not have been accommodated with only a four-lane section. Tables I-6 and I-7 compare the Level of Service provided by the 4-Lane and 6-Lane Alternates. As shown, the only acceptable intersections under the Four-Lane Alternate would have been Forge Road and Mt. Vista Road.

Building the project in stages, first the Four-Lane Alternate, and then expanding to the Six-Lane Alternate was determined not to be feasible. All drainage structures would have had to be relocated and driveways would have to be

readjusted. Utilities could have been relocated to their ultimate location; however, residents would have had utility poles located in useful portions of their property for a number of years. The corridor would have also been faced with not one but two periods of major disruption while construction was accomplished.

The Four-Lane Alternate would have also created maintenance of traffic problems for the two bridge structures by reducing through traffic to 2 lanes during construction.

For these reasons, the Four-Lane Alternate has been dropped from consideration.

Staging Alternatives

As is the case with many highway improvement studies, there is a variance of project need exhibited along the U.S. Route 1 corridor that is a function of both location and time. Based upon the detailed studies and consultation with local representatives, the first phase of this project will begin at Silver Spring Road and end at Pinedale Drive. Subsequent phases of this project will be initiated by SHA as the traffic need occurs, in consultation with local elected officials. The environmental impacts associated with staging this project will, therefore, depend upon the timing and extent of the improvements.
























Bridge Replacement Over Gunpowder Falls

SHA has initiated final design for the portion of U.S. Route 1 between Miller Road and Sheradale Drive. The existing roadway in this area is unsafe due to poor horizontal alignment, substandard superelevation and narrow pavement. The bridge structure was originally a two lane structure which was widened to 4 lanes in the 1930's. The structure

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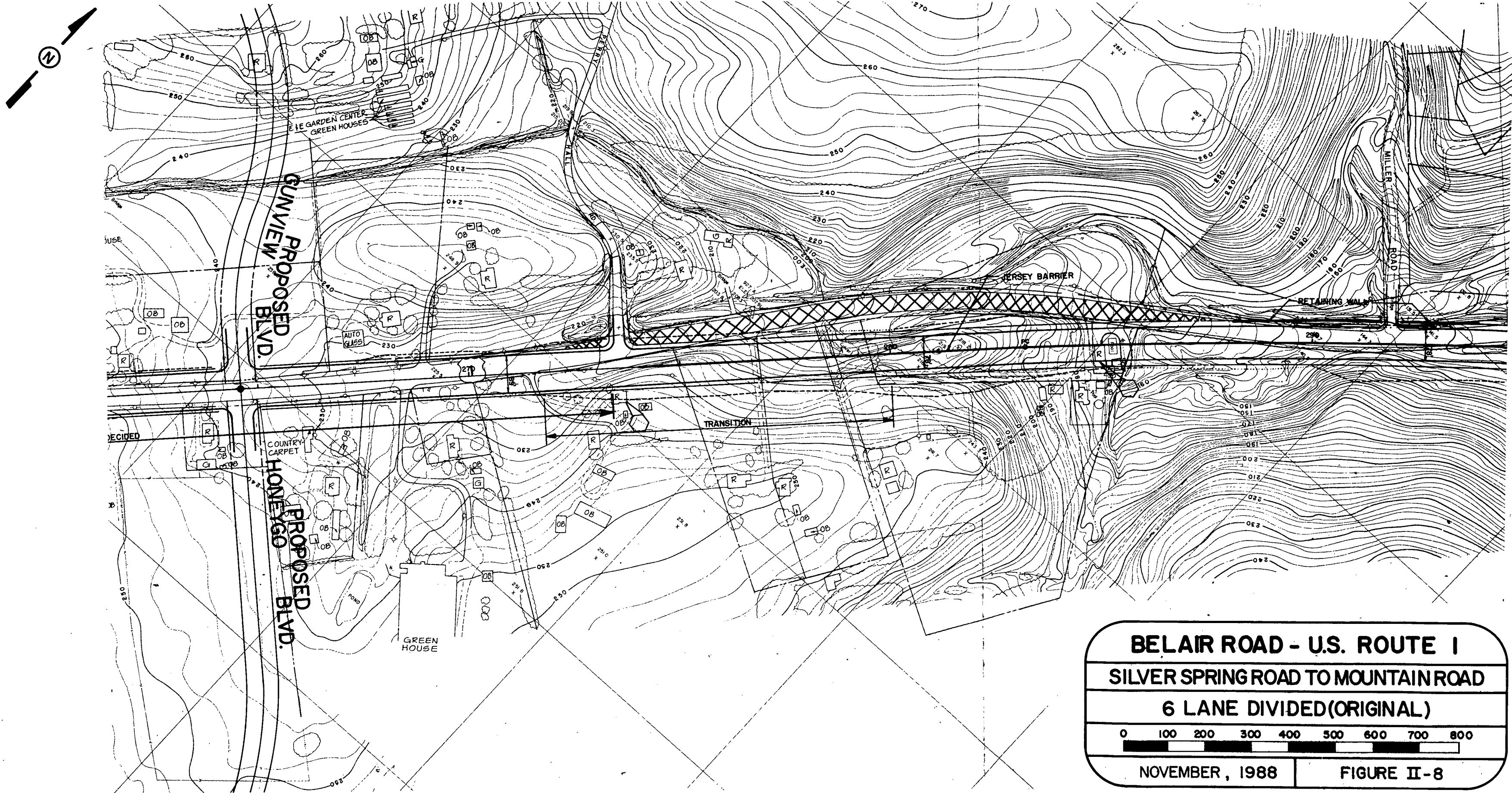
was topped by floodwaters of Hurricane Agnes in 1972 and both approach embankments were washed away. The parapets of this structure have also been severely deteriorated by age as well as vehicular accidents. As part of this improvement, a new structure will be constructed at the alignment indicated in this document. Sufficient right-of-way would be acquired to accommodate an ultimate six-lane facility (approach roads and bridge), including an equestrian passage under U.S. Route 1. The structure will be striped for four lanes with a future capacity of up to six lanes.

LEGEND

| | |
|---|------------------------------|
|  | EXISTING RIGHT OF WAY |
|  | PROPOSED RIGHT OF WAY |
|  | EXISTING ROADWAY |
|  | NEW OR IMPROVED ROADWAY |
|  | STUDY BY OTHERS |
|  | PROPOSED RETAINING WALL |
|  | PAVEMENT TO BE REMOVED |
|  | EXISTING BRIDGE |
|  | NEW OR IMPROVED BRIDGE |
|  | JERSEY BARRIER |
|  | HISTORIC SITE NUMBER |
|  | HISTORIC SITE BOUNDARY |
|  | CUT LIMIT |
|  | FILL LIMIT |
|  | WETLANDS |
|  | 100 YEAR FLOODPLAIN |
|  | STATE PARK PROPERTY |
|  | AIR & NOISE RECEPTOR |
|  | RELOCATION |
|  | STATIONING (IN FEET) |
|  | POINT OF CURVE / TANGENT |
|  | CUL - DE - SAC (TURN AROUND) |
|  | DIRECTION OF TRAVEL |

MAF

MAF



MAF

MAF

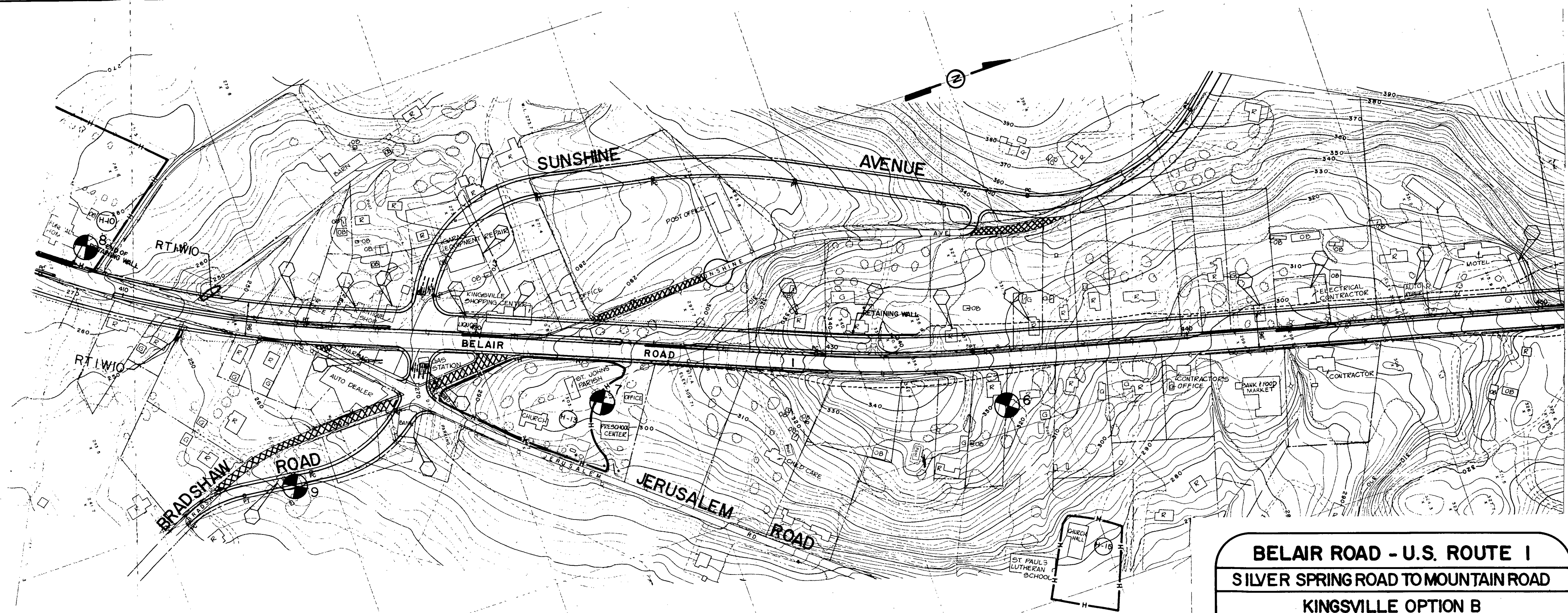
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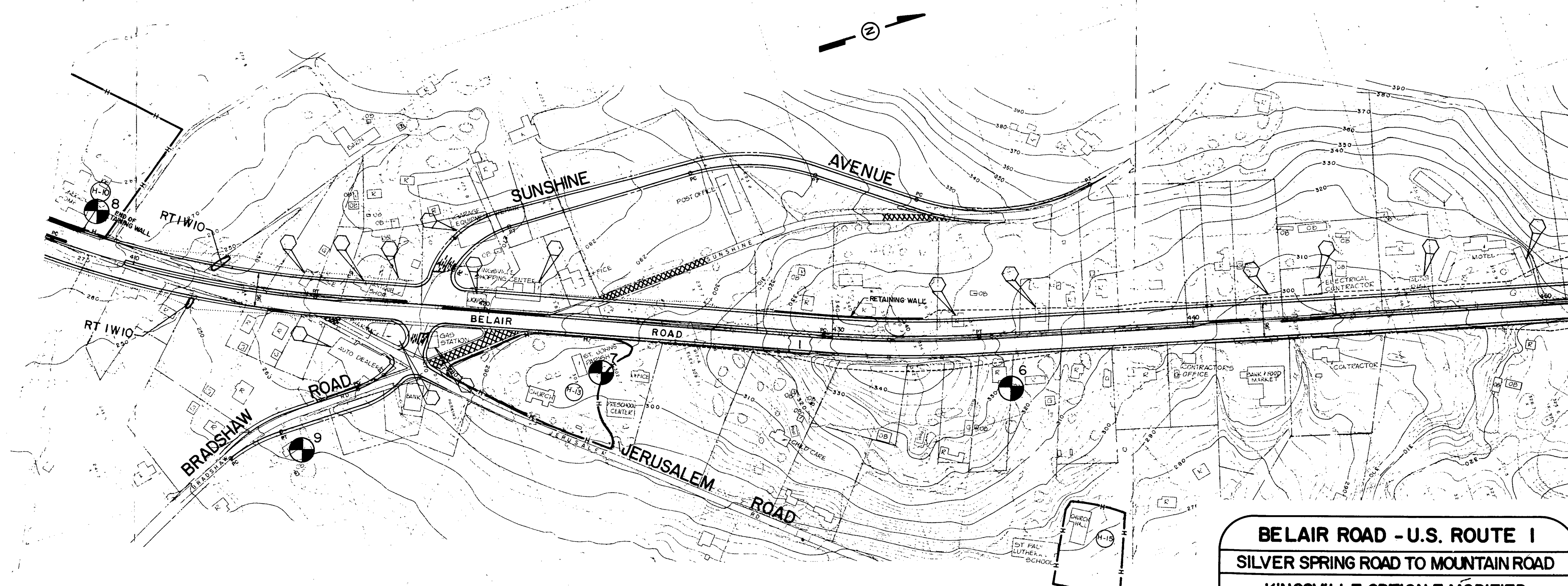
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OPTION B
KINGSVILLE INTERSECTION IMPROVEMENTS

KINGSVILLE

| | |
|--|--------------|
| BELAIR ROAD - U.S. ROUTE 1 | |
| SILVER SPRING ROAD TO MOUNTAIN ROAD | |
| KINGSVILLE OPTION B | |
| | |
| NOVEMBER, 1988 | FIGURE II-16 |



OPTION E MODIFIED
 KINGSVILLE INTERSECTION IMPROVEMENTS

KINGSVILLE

| | |
|--|--------------|
| BELAIR ROAD - U.S. ROUTE 1 | |
| SILVER SPRING ROAD TO MOUNTAIN ROAD | |
| KINGSVILLE OPTION E MODIFIED | |
| | |
| NOVEMBER, 1988 | FIGURE II-17 |

III. AFFECTED ENVIRONMENT

III. AFFECTED ENVIRONMENT

A. SOCIAL, ECONOMIC AND LAND USE

1. Social Considerations

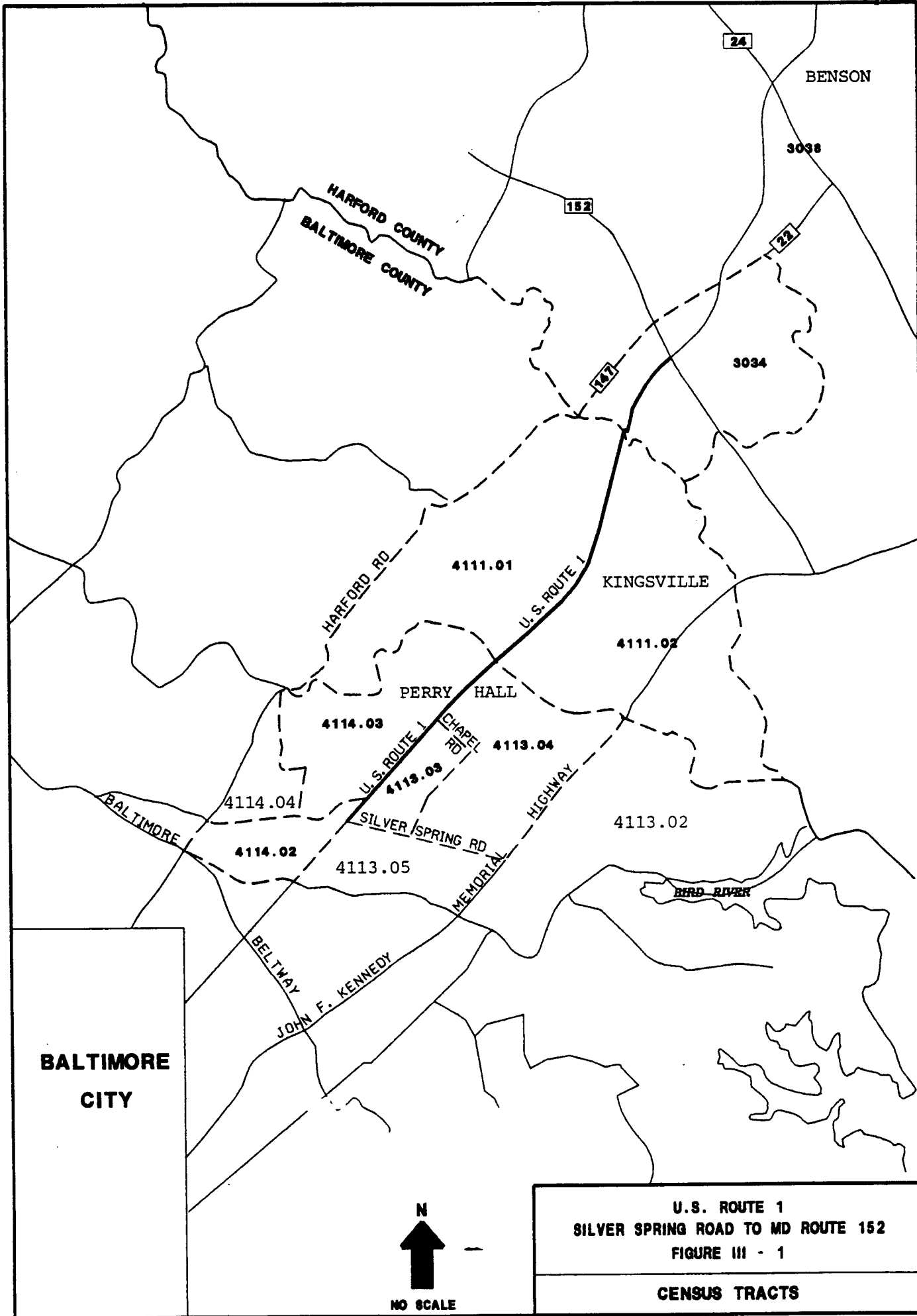
a. Population

U.S. Route 1, within the limits of this study, passes through portions of six Baltimore County census tracts (See Figure III-1). These six tracts, plus three adjoining tracts, form Baltimore County Election District 11, which encompasses both Perry Hall and Kingsville. Between 1970 and 1980, Baltimore County's population increased by 4.0%. During that same period, the population in Election District 11 increased by 22.5%, over five times the County rate. Census data for 1970 and 1980 are provided on Tables III-1 and III-2.

The U.S. Route 1 project only passes through one Harford County census tract (See Figure III-1). Harford County's population growth rate from 1970 to 1980 was 26.5%. The growth rate for tract 3034 (Fallston) was 12.7%.

Population projections for Baltimore County indicate a growth rate for the County of approximately 12% for the period 1980-1990. The U.S. Route 1 area (between I-695 and Gunpowder Falls) is within the Whitemarsh Growth Area. This area is designated by the County Master Plan as being particularly suited for increased development. The growth rate in housing units for the U.S. Route 1 portion of the Whitemarsh

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U.S. ROUTE 1
 SILVER SPRING ROAD TO MD ROUTE 152
 FIGURE III - 1

CENSUS TRACTS

TABLE III-1
1970 Census Data

Baltimore County

Election District 11*

| Census Tract | Population |
|--------------|------------|
| 4111.01 | 1,280 |
| 4111.02 | 2,918 |
| 4112.01 | 2,163 |
| 4112.02 | 3,216 |
| 4113.01 | 6,505 |
| 4113.02 | 2,390 |
| 4114.01 | 5,322 |
| 4114.02 | 2,820 |
| ED Total | 26,614 |
| County Total | 630,409 |

Harford County

| Census Tract | Population |
|--------------|------------|
| 3034 | 3,161 |
| County Total | 115,378 |

*Census tracts were changed for 1980 Census.

TABLE III-2
1980 Census Data
Baltimore County

| Census Tract | Total Population | % Under 6 years | % 6 to 17 | % 18 to 64 | % 65 & over | Racial Composition % Black | Total Housing Units | Single Family Dwellings (%) | Occupancy rate (%) | Median Household Income |
|--------------|------------------|-----------------|-----------|------------|-------------|----------------------------|---------------------|-----------------------------|--------------------|-------------------------|
| 4111.01 | 1,316 | 3.9 | 18.9 | 64.4 | 12.6 | 0.8 | 475 | 89.0 | 81.0 | 22,286 |
| 4111.02 | 3,074 | 3.9 | 18.9 | 64.4 | 9.6 | 1.2 | 992 | 93.0 | 88.0 | 25,270 |
| 4113.02 | 2,029 | 4.3 | 18.4 | 64.8 | 12.3 | 6.1 | 736 | 79.0 | 81.0 | 18,810 |
| 4113.03 | 3,914 | 3.9 | 17.6 | 70.4 | 7.9 | 0.2 | 1,501 | 85.0 | 66.0 | 22,443 |
| 4113.04 | 4,546 | 5.2 | 21.5 | 66.3 | 6.9 | 1.2 | 1,457 | 96.0 | 94.0 | 30,823 |
| 4113.05 | 2944 | 12.1 | 20.7 | 63.9 | 3.0 | 1.0 | 997 | 92.0 | 87.0 | 24,360 |
| 4114.02 | 7,807 | 9.3 | 17.3 | 69.2 | 4.0 | 0.1 | 3,045 | 71.0 | 53.0 | 21,153 |
| 4114.03 | 5,085 | 6.1 | 19.8 | 66.6 | 7.3 | 0.3 | 1,746 | 97.0 | 95.0 | 28,049 |
| 4114.04 | 1,877 | 3.7 | 19.7 | 67.2 | 9.1 | 0.1 | 662 | 92.0 | 90.0 | 24,566 |
| ED | 32,592 | | | | | | | | | |
| County | 655,615 | 24.3 | | 65.1 | 10.6 | 8.2 | 243,994 | 77.1 | 64.2 | 21,640 |

Harford County

| Census Tract | Total Population | % Under 6 years | % 6 to 17 | % 18 to 64 | % 65 & over | Racial Composition % Black | Total Housing Units | Single Family Dwellings (%) | Occupancy rate (%) | Median Household Income |
|--------------|------------------|-----------------|-----------|------------|-------------|----------------------------|---------------------|-----------------------------|--------------------|-------------------------|
| 3034 | 3,563 | 4.4 | 24.8 | 63.8 | 6.8 | 1.4 | 1,120 | 95.0 | 91.0 | 26,746 |
| County | 145,930 | 31.3 | | 62. | 6.4 | 8.3 | 49,435 | 79.0 | 70.0 | 21,587 |

III-4

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Growth Area for the period 1976-1995 is estimated at 415% by the County Master Plan.

Projected population growth for the Harford County portion of the U.S. Route 1 project is not specifically documented; however, the Harford County Master Plan does allow for intense commercial development for the U.S. Route 1 corridor. No major residential development is planned for the Fallston area due to a lack of public facilities.

b. Communities

U.S. Route 1, within the limits of this study, passes through the communities of Perry Hall, Kingsville and Fallston. Perry Hall and Kingsville are in Baltimore County. The Fallston community is located in Harford County. Residents in the study corridor identify strongly with their communities.

The Perry Hall Community extends generally from White Marsh Run to Big Gunpowder Falls. The population of Perry Hall was 28,202 in 1980. Perry Hall is a suburban community, consisting of single family homes and some apartment complexes. Many of the properties adjacent to U.S. Route 1 are commercial establishments. Public water and sewer service extends throughout Perry Hall.

Kingsville is located near the intersection of U.S. Route 1 and Bradshaw/Jerusalem Roads. Kingsville's population was 4,930 in 1980. This area is characterized by a much smaller commercial district and larger individual homesites. Some larger farms and estates also exist in the Kingsville area. Kingsville is not served by public water or sewer;

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therefore, development is proceeding at a pace that is significantly slower than Perry Hall's.

Fallston, a relatively new community, is located west of the U.S. Route 1/MD Route 152 intersection. The residential portion of Fallston is generally located west of Harford Road. Most of the properties that abut U.S. Route 1 are commercial. Fallston is not served by public water or sewer systems.

c. Community Facilities

There are seven churches located in the project corridor: St. Joseph's Catholic, Perry Hall Presbyterian, Perry Hall United Methodist, St. Michael's Lutheran, Perry Hall Baptist, St. Johns Episcopal and St. Paul's Lutheran (See Figure III-2).

Public schools in the corridor include Perry Hall Senior High School, Perry Hall Middle School, Perry Hall Elementary School, Kingsville Elementary School and Gunpowder Elementary School. The old Perry Hall Elementary School, located several blocks to the north of the new school is currently used as a day care facility. The New Tabernacle Bible School (a private facility) is located in Perry Hall on the east side of U.S. Route 1. St. Joseph's Church also operates a parochial school (grades K through 8).

There are two hospitals near the project corridor. Fallston General Hospital is located on U.S. Route 1, just north of MD Route 152. Franklin Square Hospital is located approximately three miles southeast of the U.S. Route 1/Silver Spring Road intersection (off the project mapping). Several private medical centers,

Ward

physicians offices and professional buildings are also located in Perry Hall, Kingsville and Fallston.

The Baltimore County portion of the corridor is served by the Whitemarsh Station of The Baltimore County Police Department, which is located near White Marsh Mall. The Baltimore County Fire Department operates out of a recently completed station in Perry Hall located on the west side of U.S. Route 1 north of Joppa Road.

Fire and emergency services are provided in Harford County by the volunteer station in Fallston on Carrs Mill Road. Law enforcement for the Harford County portion of the study area is provided by the Maryland State Police, Benson Barracks.

2. Parks and Recreation

Recreational opportunities are provided by the athletic fields associated with Kingsville Elementary and Perry Hall Elementary Schools, and Gunpowder Falls State Park. The State Park is located in two stream valleys, those of the Big and Little Gunpowder Falls. U.S. Route 1 crosses Gunpowder Falls State Park at two locations (See Exhibit III-2). More information concerning the State Park is provided in Section IV.A.2 and in the Section 4(f) Evaluation (Section V).

Until recently, Baltimore County Department of Recreation provided soccer facilities at a leased facility known as "Lassahn's Field", in Perry Hall. The recent sale of this property to a developer, however, has halted the recreational use (See letter dated August 5, 1988 in Section VII).

3. Economic Setting

Baltimore County is an attractive area for industrial and business development. Over 11,000 firms engage in broadly diversified types of manufacturing, trade and business enterprise. More than 315,000 Baltimore County residents are employed and their salaries total over \$5 billion annually. Harford County has a less diversified economic base. Most of the employment opportunities exist on the eastern side of the County, near Aberdeen and Edgewood. A total of 45,100 persons work in Harford County, with over 21,000 employed in the military/government sector.

There are no major employment centers located within the study corridor. There are, however, many employment opportunities in the small service sector enterprises located along the urbanized portions of the corridor.

The 1980 median household incomes for the study corridor were in the \$22,000 to \$30,000 range (See Table III-2), which is higher than either County-wide average.

4. Existing Land Use

The existing land use in the corridor is characterized primarily by strip commercial zones near the major intersections along U.S. Route 1, separated by low to high residential development, open spaces and some farms. Residential development is, however, rapidly supplanting agricultural uses.

The most intense commercial district is located in Perry Hall between Silver Spring Road and Forge Road. There are several shopping centers and many individual shops, restaurants, service stations and other businesses.

Since there is no access control, each business has at least one direct entrance onto U.S. Route 1.

A similar situation exists, although to a smaller degree, in Kingsville and Fallston. Since Kingsville is an older community, the building setbacks were not controlled and are inadequate in many instances. All four quadrants of the U.S. Route 1/MD Route 152 intersection at Fallston are zoned commercial. One single family residence, however, remains in the southwest quadrant.

Park land dominates the land use along the portions of the Gunpowder Falls State Park crossed by U.S. Route 1. The Park consists of dense forests surrounding the two streams. With the exception of a canoe access point (with a small parking area) at the Big Gunpowder, there are no park facilities along the project corridor.

Existing zoning patterns in Baltimore and Harford Counties along the U.S. Route 1 corridor are shown on Figure III-3.

5. Future Land Use

Examination of the Baltimore County Master Plan 1979-1990 reveals that Perry Hall is an area where new development is being encouraged by the County. The Plan states that the Perry Hall area is particularly well suited for development due to its location in relation to transportation links and utility extensions. Kingsville, conversely, is planned to remain a rural and agricultural area due to the low level of public facilities. The Transportation Element of the Master Plan recommends improvement of U.S. Route 1 from I-695 to Forge Road, as well as the construction of Honeygo Boulevard, an

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east/west arterial. Future land use for Baltimore County is shown on Figure III-4.

The Harford County Master Plan (May, 1977) designates much of the U.S. Route 1/MD Route 152 intersection as medium to high intensity development. The area between the Little Gunpowder Falls and the MD Route 152 area, however, is designated as agricultural/rural residential. Improvements to U.S. Route 1, within the limits of this study, are identified as a Primary non-critical project in the transportation element of the Harford County Plan. Future development patterns for Harford County is shown on Figure III-5.

6. Transportation

a. Existing Highway Network

The north/south movement of traffic through the study area is currently provided by U.S. Route 1 (4 lanes), MD Route 147 (2 lanes) and Interstate 95 (6 lanes, divided). The east/west traffic movement within the study area is provided by Silver Spring Road (4 lanes), Joppa Road (2 lanes), Mt. Vista Road (2 lanes), Sunshine Avenue/Bradshaw Road (2 lanes) and MD Route 152 (4 lanes).

A commuter Park 'N' Ride facility exists on MD Route 152 just west of MD Route 147. The Mass Transit Administration's bus route 15A links Perry Hall and Whitemarsh to the Baltimore central business district. MTA also operates a commuter system between Havre de Grace/Belair and Baltimore via MD 152, MD 24 and I-95. Transit patronage, however, is not expected to increase enough to warrant substantial increases in service in the near future.

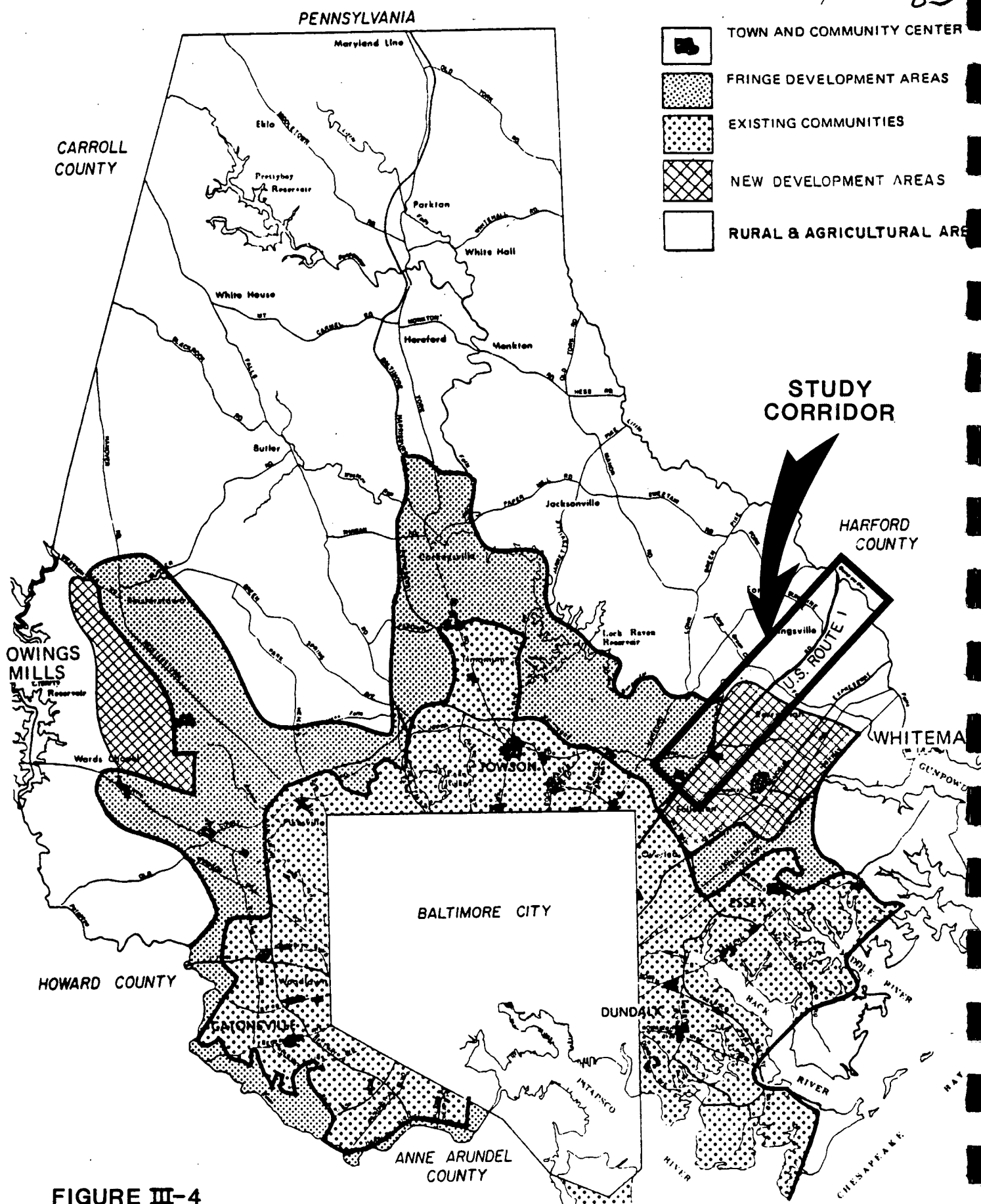
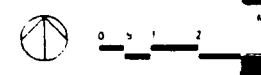


FIGURE III-4

BALTIMORE COUNTY
GROWTH AREAS THROUGH 1990

Source: Baltimore County Master Plan



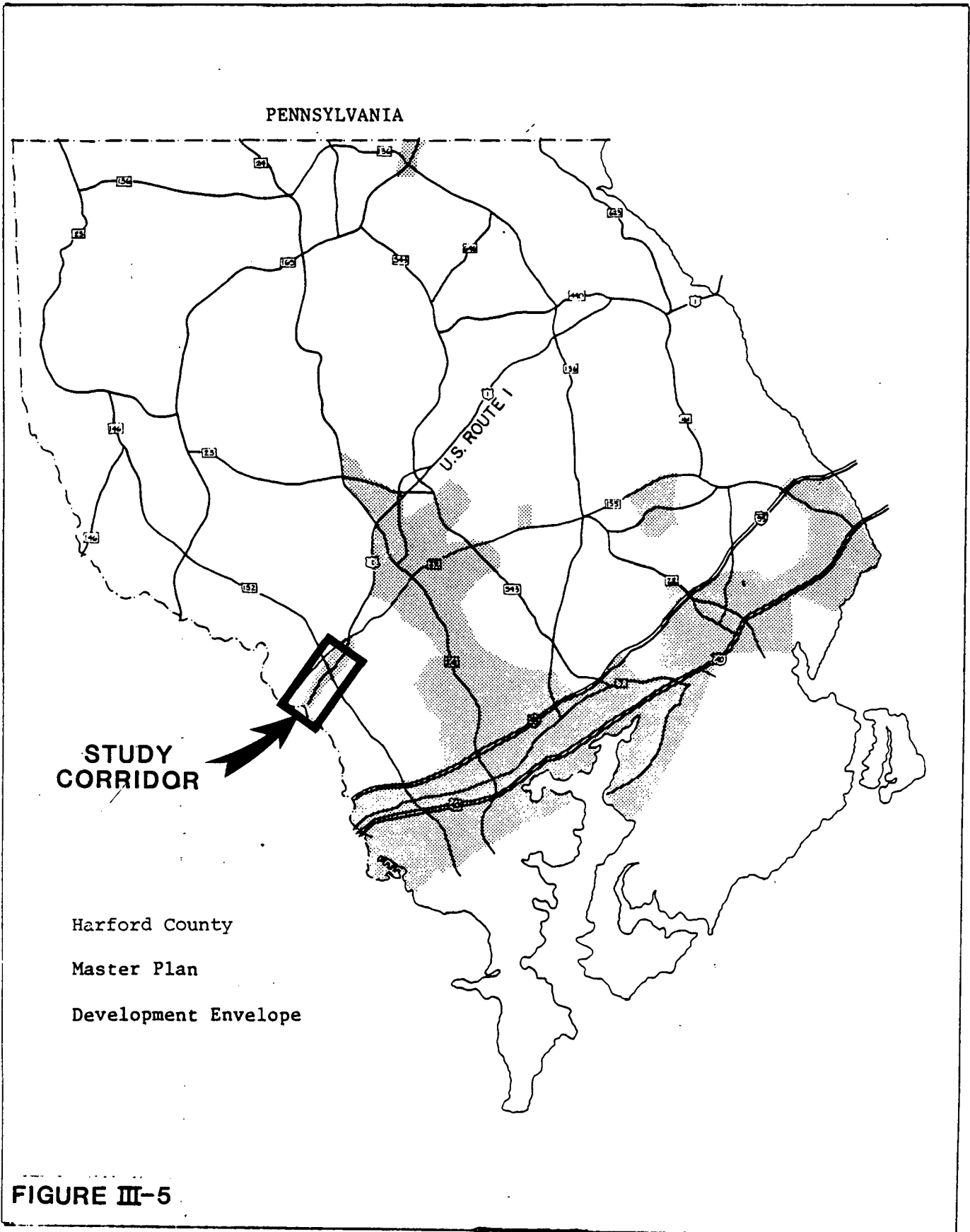


FIGURE III-5

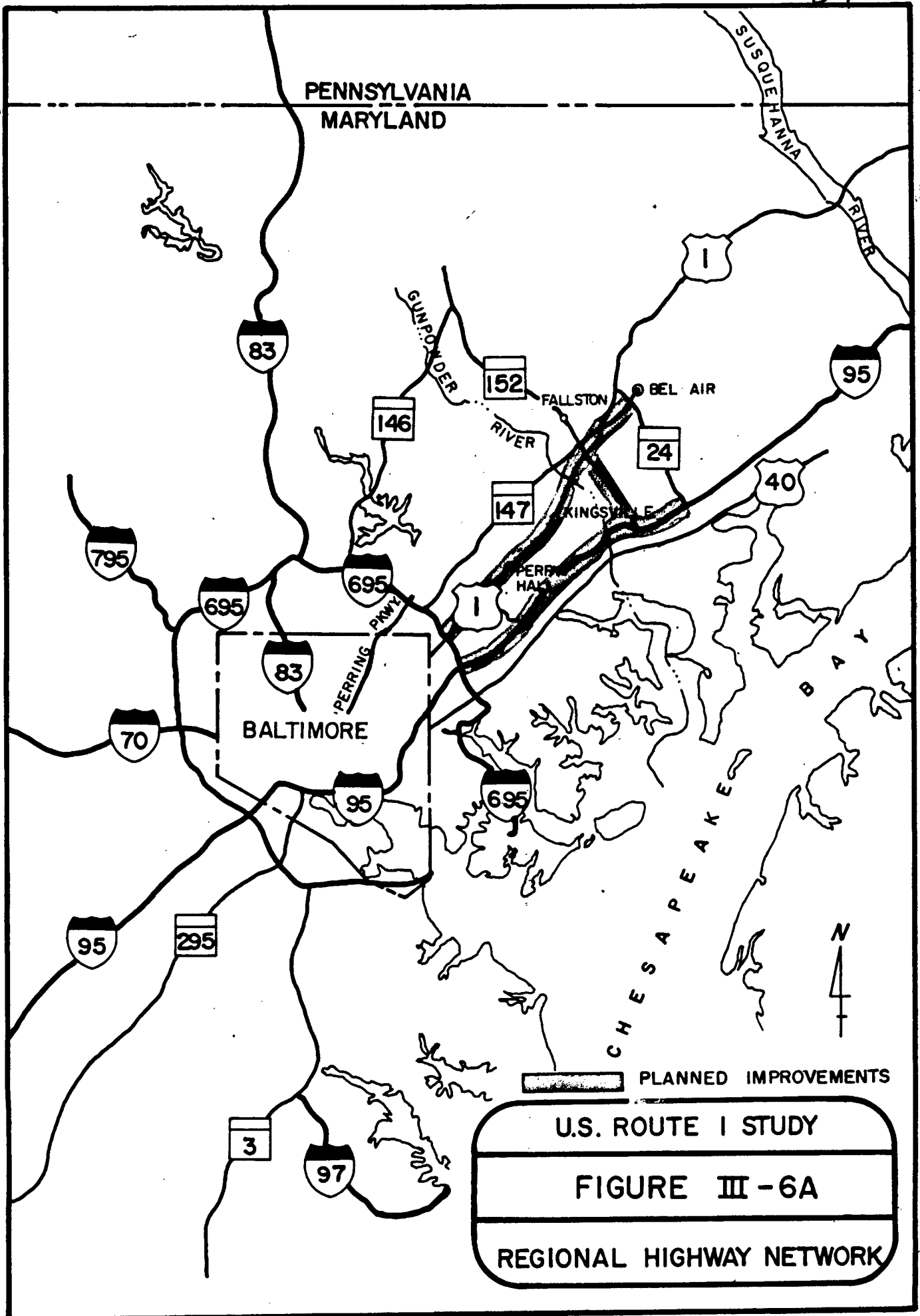
b. Planned Highway Network

The State Highway Administration is in the process of preparing final plans for MD Route 43 (Whitemarsh Boulevard). The facility will connect I-95 to I-695 through the new White Marsh town sector. MD Route 43 will cross U.S. Route 1 via grade separation just south of the project area. The MD Route 43 project also includes improvements to U.S. Route 1 from I-695 to Silver Spring Road.

Maryland DOT is also planning to widen I-95 from four lanes to six lanes from I-695 to MD 24 and to complete the interchange movements at MD Route 152. The U.S. Route 1 Business Study (MD Route 152 to MD Route 24) and the U.S. Route 1/ Hickory Study are currently in project development. Widening of MD Route 152 is also being considered.

Baltimore County has plans to improve circulation in the Whitemarsh area by constructing Honeygo Boulevard. This four-lane curbed roadway will connect Perry Hall Boulevard, just south of Whitemarsh Mall, to U.S. Route 1, just north of Forge Road. An extension of this facility to the west of U.S. Route 1, known as Gunview Road, will provide similar improvements to circulation to west Perry Hall and Carney. Figure III-6B illustrates some of the planned highway improvements for the project corridor. These projects are all included in the Level of Service and traffic volume projections for the U.S. Route 1 project.

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B. NATURAL ENVIRONMENT

1. Topography and Geology

The U.S. Route 1 study area topography is generally rolling with stream valleys providing major relief. Local relief is approximately 100 feet, except for the stream valleys, where it approaches 200 feet in some areas.

Most of the southern portion of the study corridor follows the Fall Zone Region, which constitutes an area of transition between the Piedmont Upland Section underlain by crystalline rocks and the Coastal Plain Province underlain by sediments. The Gunpowder Gorge District follows the Big Gunpowder Falls. This area is characterized by steep walled valleys incised into crystalline rock. The northern portion of the study area lies in the Bel Air Upland District. This area is characterized by rolling uplands and a marble valley. The upland is incised by the fluvial erosion of the Little Gunpowder Falls.

The southern portion of the study area has been an historical source of sand and gravel, with one abandoned pit located near Silver Spring Road. The northern portion of the study area has been mined for gneiss and amphibolite (crushed stone). Several abandoned quarries are located near Wildcat Branch. Another abandoned quarry lies south of Sheradale Drive, along the west side of Belair Road.

2. Soils

The southern portion of the study area, between Silver Spring Road and the Big Gunpowder Falls, is dominated by the Beltsville - Chillum - Sassafras soil association. Soils in this group have moderate to high erosion potential. The remaining portion of the study is overlain by the Baltimore - Conestoga - Hagerstown association. Soils in this group have moderate erosion potential. None of the soils in the study area have significant engineering limitations for highway construction; however, some blasting will be required in the vicinity of the Big and Little Gunpowder Falls.

Lists of soils associated with prime farmland and state-wide important farmland were obtained from each County Soil Conservation Service office. These lists were compared to the Soil Survey Maps. (Neither office reported the existence of unique farmland soils.) Figure III-7 illustrates the amount and location of farmland based upon soil type.

3. Water Resources

a. Surface Water

U.S. Route 1, within the limits of this study, is drained by Whitemarsh Run, Big Gunpowder Falls and Little Gunpowder Falls. The roadway also crosses Wildcat Branch and Rocky Branch, which are tributaries of the Little Gunpowder. U.S. Route 1 closely parallels a small un-named tributary of the Big Gunpowder for a distance of approximately 3000 feet near the Gunpowder Falls State Park.

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The Gunpowder Falls river basin includes the northeastern corner of Carroll County, most of north and northeastern Baltimore County and the southwestern edge of Harford County. This covers about 478 square miles in Maryland. The basin drains another 11 square miles in Pennsylvania. The Gunpowder Falls runs about 35 miles from its headwater in Pennsylvania to its discharge point in the Chesapeake Bay off Rocky Point.

Streams throughout the U.S. Route 1 corridor are characterized by rocky bottoms and moderate gradient channels. Sedimentation is only a problem in localized areas where urbanization has increased soil erosion.

Gunpowder Falls supplies raw water for consumption by metropolitan Baltimore residents from an impoundment at Loch Raven Reservoir. The reservoir is approximately 8 miles upstream of the U.S. Route 1 crossing. A concrete-lined, 7 mile long tunnel carries raw water from Loch Raven Reservoir to the Lake Montebello filtration plant in Baltimore City.

Gunpowder Falls is a Class I stream. In comparison with other areas, the Gunpowder Falls Basin has generally good water quality according to the Gunpowder River Basin Water Quality Management Plan prepared in the mid-1970's. More recent water quality monitoring data show this trend is continuing. Problems with dissolved oxygen, organic loadings, acidity and toxic substances are minimal. Some localized elevated bacterial levels exist near malfunctioning community sewage treatment plants.

The Little Gunpowder Falls and its tributaries are classified as Class III streams by the Maryland Department of the Environment. The Class III classification includes waters which have the potential for or are:

- 1) Suitable for the growth and propagation of trout; and
- 2) Capable of supporting natural trout populations and their associated food organisms.

In their coordination letter to the State Highway Administration, DNR's Tidewater Administration provided water quality data for Rocky Branch and Wildcat Branch (See Section VII). The pH and temperature parameters are within DNR's water quality criteria for Class III waters. A cumulative summary of water quality data for the Gunpowder River Basin is provided in Appendix IX-8.

b. Groundwater

Public water and sewer is available as far north as the Big Gunpowder Falls. Beyond this point, all commercial and residential water and sewer needs are met by wells and septic systems. As discussed previously, the U.S. Route 1 study area lies mostly within the Piedmont province.

The pore space in the recrystallized metamorphic rocks of the Piedmont are very small and solid rocks tend to be rather impermeable. Where these rocks have been jointed and fractured, the openings allow water movement and storage. The water yields of wells in the Piedmont region depends more upon local

conditions of jointing and fracturing than it does on the kind of rock. The most useful reserves are generally in the uppermost 250 feet. Yields from individual wells in the study corridor vary from 1 to 100 gpm. Wells yielding only 10 to 15 gpm are common, while wells yielding more than 50 gpm are rare.

Groundwater in the study area is usually soft, with relatively little dissolved matter and is of good quality. The U.S. Geological Survey (U.S.G.S.) reports the following groundwater quality data for the Piedmont province (all values are ppm):

| | Low | High | Average |
|---|------|------|---------|
| Dissolved solids | 21 | 305 | 105 |
| Hardness (as Ca CO ₃) | 6 | 246 | 59 |
| Iron (30% of samples contained 0.3 ppm) | - | 3.5 | - |
| Nitrate | 0.02 | 76 | 5.1 |
| Silica | - | - | 40 |

c. Floodplains

Federal Emergency Management Agency (FEMA) floodplain limits (100-year frequency) were plotted on detailed alternates mapping for all streams except the Big Gunpowder Falls which is not covered by the FEMA study. The 100-year floodplain elevation for the Big Gunpowder was determined using the U.S.G.S. exceedance probability method (Herb, 1987). This floodplain limit was also plotted on the detailed alternates mapping (See Figure II-6 to Figure II-17).

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4. Vegetation and Wildlife

a. Vegetation

The vegetation types in the project corridor can be categorized into several distinct types based upon successional stages and intervention of man. The natural climax vegetation of this study corridor is the hardwood forest. Much of the area is still in hardwood forest or has reverted to forest after many years of abandonment. Also, much of the area is dominated by man for business, industry, residences, and agriculture. Land more recently left to the natural processes of succession are abandoned fields or have progressed to the shrub vegetation community. Each vegetation community is distinct in its species dominance but there is considerable overlap of some species between communities.

The Man Dominated Vegetation Community varies greatly through the corridor. The common denominator in this community is that natural succession is kept from progressing by man's activities. Some of the natural vegetation persists in the form of large trees, mostly oaks and maples (Quercus spp. and Acer spp.) which are valued for shade and aesthetic quality. Many exotic ornamental trees, shrubs, and flowers have been planted in these areas especially around residences. Most of the area not occupied by trees, shrubs and flowers is mowed so that only those plants capable of withstanding periodic clipping by the lawnmower survive. Natural vegetation is limited to weedy places between lots and around buildings or gardens. Most of the vegetation in these small areas is herbaceous: grasses (Gramineae), goldenrods (Solidago spp.), ragweed (Ambrosia artemisiifolia),

bush clover (Lespedeza spp.), wild carrot (Daucus carota), evening primrose (Oenothera biennis), partridge pea (Cassia chamaecrista) and others. The vegetation in these small patches is similar to the vegetation found in the Abandoned Field Community.

Large portions of the Man Dominated Vegetation Community are devoid of vegetation. The space is taken by buildings, parking lots, roads, and utility operations.

The Agricultural Vegetation Community exists on tracts of land within the project corridor used to grow crops and pasture livestock. Chief crops are corn, soybeans and hay. Some pasture land contains scattered trees and/or shrubs; but grasses, legumes and other hardy herbaceous plants capable of withstanding grazing are dominant.

Small areas do occur where native vegetation persists. Native herbaceous species occur around field perimeters, along lanes, and in hedgerows. Herbaceous species in these small patches are generally the same as those in the Abandoned Field Vegetation Community. Woody plants observed in hedgerows include briar (Rubus spp.), poison ivy (Rhus radicans), Virginia creeper (Parthenocissus quinquefolia), flowering dogwood (Cornus florida), arrow-wood (Viburnum dentatum), sweet gum (Liquidambar styraciflua), black gum (Nyssa sylvatica), sassafras (Sassafras albidum), black locust (Robinia pseudoacacia), Japanese honeysuckle (Lonicera japonica) and Staghorn Sumac (Rhus typhina).

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The Abandoned Field Vegetation Community is dominated by herbaceous plants. The community is in the early stages of succession and woody plants have not yet begun to invade. Much of this community was formerly agricultural land but some is disturbed land along roadsides, utility corridors, fringes of industrial sites or vacant areas which will perhaps be used for industrial or residential expansion.

Species composition within the community varies with soil condition, moisture, and soil disruption. At the time field investigations were conducted, goldenrods, flowering spurge (Euphorbia corollata), ragweed, knapweed (Centaurea spp.), clovers (Trifolium spp.), and partridge pea were conspicuous along with bush clover, evening primrose, wild carrot, sedges and grasses.

The Shrub Vegetation Community is characterized by herbaceous species of plants similar to the ones associated with the Abandoned Field Community but woody species of plants have invaded, and natural successional changes have progressed.

Included in the shrub category are shrub-like woody plants, woody vines, and young trees. Trees are categorized as shrubs here if the diameter at breast height (DBH) is less than 3.5 inches.

Typical species of woody plants commonly observed in this community include: sassafras, briar, red maple (Acer rubrum), sweet gum, black gum, black locust, yellow poplar (Liriodendron tulipifera), honey locust (Gleditsia triancanthos), several species of sumac (Rhus spp.), poison ivy (R. radicans), staghorn summac, wild grape (Vitis spp.), and Virginia

creeper. Here again, Japanese honeysuckle is locally abundant sometimes forming a dense tangled ground cover.

The Hardwood Forest Vegetation Community covers areas dominated by deciduous hardwood trees (DBH 3.5" or more).

On dry uplands in the study corridor, the white oak (Quercus alba), red oak (Q. rubra), and yellow poplar are the most numerous species. Other common tree species observed in the upland forest include: black oak (Q. velutina), hickory (Carya spp.), wild cherry (Prunus serotina), sweet gum, black gum, American beech (Fagus grandifolia), red maple, sassafras, and black locust. Young deciduous tree species commonly occur as understory shrubs along with flowering dogwood, wild grape, greenbriar (Smilax rotundifolia), Virginia creeper and poison ivy. The ground is generally covered with a thick layer of leaf litter. Tree seedlings are common plants of the forest floor. It is expected that many herbaceous species of plants also occupy the forest floor and would be especially evident during spring and early summer. Blueberry (Vaccinium spp.) is locally common and violets (Viola spp.) are found scattered throughout.

On moist lowland sites, as in the riparian areas of the Big Gunpowder Falls, Little Gunpowder Falls, Rocky Branch and Wildcat Branch floodplains, the hardwood forest is dominated by river birch (Betula nigra) sycamore (Platanus occidentalis), pin oak (Q. palustris), box elder, black willow (Salix nigra) with red elm (Ulmus rubra), red maple, silver maple

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(Acer saccharinum), and ash (Fraxinus spp.). Shrub-sized species in the understory include saplings of the tree species, plus pawpaw (Asimina triloba), spice bush (Lindera benzoin), elderberry (Sambucus canadensis), poison ivy, Virginia creeper and blueberry.

b. Wildlife

The project corridor, with its varied plant associations provides suitable habitat for many mammals, birds, reptiles, amphibians and fish. Mammals observed or expected to occur within the project corridor are listed in Appendix IX-1. Some, like the whitetail deer (Odocoileus hemionus), raccoon (Procyon lotor), opossum (Didelphis marsupialis), red fox (Vulpes fulva), grey fox (Urocyon cinereoargenteus), striped skunk (Mephitis mephitis), and the cottontail rabbit (Sylvilagus floridanus) use most or all of the habitats occurring in the project corridor for shelter, breeding, foraging or as travel corridors within their home ranges. Others are more specific in their habitat requirements. The meadow vole (Microtus pennsylvanicus) and the meadow jumping mouse (Zapus hudsonius) prefer open areas and would be expected to occupy the abandoned field and shrub vegetation communities. The common woodchuck (Marmota monax) may also be found here or in the agricultural vegetation community. It often dens in woodland edges or hedgerows in close proximity to more open feeding areas. Grey squirrels (Sciurus carolinensis), white footed mouse (Peromiscus leucopus) and the eastern chipmunk (Tamias striatus) prefer wooded areas. The grey squirrel and eastern chipmunk were observed during on-site reconnaissance

in the hardwood vegetation community and in the man dominated sector where large oak trees are present.

Many mammals prefer to live in very close proximity to water. This riparian habitat is available along the small streams, the Gunpowder and Little Gunpowder Falls in the project corridor for such mammals as muskrats (Odatra zibethica), mink (Mustela vison), and perhaps beaver (Castor canadensis) and river otter (Lutra canadensis).

Appendix IX-2 lists species of birds that could be expected to inhabit the project corridor as migrants, during nesting seasons, or as permanent residents. Those species indicated as being "I.D." in Appendix IX-2 are interior dwelling forest/woodland species. The red-tailed hawk (Buteo jamaicensis), common crow (Carvus brochyrhynchos), and turkey vulture (Cathartes aura) commonly use open areas for foraging and wooded areas for nesting and cover. Other birds show a preference for the open agricultural lands and abandoned fields. Mourning doves (Zenaidura macroura) were observed in these open areas during field investigations. Birds observed in the shrub areas include the cardinal (Richmondena cardinalis), catbird (Dumetella carolinensis). Others such as the towhee (Pipilo erythrophthalma), eastern mockingbird (Mimus polyglottos polyglottos), gold finch (Spinus tristis) and house wren (Troglodytes aedon) would be expected to utilize the shrub areas for foraging and cover.

Birds commonly encountered in the hardwood forest during on-site reconnaissance include the blue jay (Cyanocitta cristata), common grackle (Quiscalus quiscula), and robin (Turdus migratorius).

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Prothonotary warblers (Protonotaria citera), wood ducks (Aix sponsa), brown creepers (Certhia familiaris), pileated woodpecker (Dryocopus pileatus), red-shouldered hawk (Buteo lineatus) and Cooper's hawk (Accipiter cooperii) are other species reported to breed in the corridor woodlands.

Some species are commonly associated with human activities within the study corridor. The exotic, and not always welcome, pigeon (Columba livia), house sparrow (Passer domesticus), and starling (Sturnus vulgaris) are very common, often nesting in crevices or on ledges of homes, barns, outbuildings, industrial and commercial buildings and bridges. Other species prefer to live near humans or are at least very tolerant of humans. The robin, catbird, cardinal, mockingbird, purple martin (Progne subis), and barn swallow (Hirundo rustica) often nest in ornamental shrubbery and trees, outbuildings, or specially constructed birdhouses.

Area waterbodies provide suitable habitat for waterfowl such as the wood duck, mallard duck (Anas platyrhynchos), great blue heron (Ardea herodias), green heron (Butorides virescens virescens) and others.

Reptiles and amphibians are very common in the study corridor, Appendix IX-3. Many serve as food for creatures higher in the food chain. Frogs, for instance, are preyed upon by some mammals, birds, reptiles, and even other frogs.

Many reptiles prefer dry habitats, while most amphibians live very near the water. Some common reptiles reported to occur in the corridor near water

are the snapping turtle (Chelydra serpentina), eastern painted turtle (Chrysemys picta picta), and the northern water snake (Natrix sipedon sipedon). Frogs common to habitats that exist within the study corridor include: spring peeper (Hyla crucifer), eastern gray tree frog (H. versicolor versicolor), bullfrog (Rana catesbeiana), southern leopard frog (Rana utricularia utricularia) and green frog (Rana clamitans melanota). Common reptiles from dry areas of the project corridor include copperhead (Agkistrodon contortrix), black rat snake (Elaphe obsoleta obsoleta), garter snake (Thamnophis sirtalis sirtalis), and the box turtle (Terrapne carolina carolina). The American toad (Bufo americanus americanus) is one amphibian found in dry areas. The toad occupies a variety of habitats, including man dominated areas, where it is often valued as a predator upon insect pests.

Fish species inhabiting the riparian habitats are indicated in Appendix IX-4.

Correspondence with the U.S. Fish and Wildlife Administration and the Maryland Department of Natural Resources indicates that there are no known populations of threatened or endangered species in the study area (See Section VII.A).

5. Wetlands

The United States Fish and Wildlife Service's National Wetlands Inventory (NWI) maps and topographic maps were used to screen potential wetland areas within the corridor. The entire corridor was field checked to verify the wetlands boundaries. A field review was conducted with the Army Corps of Engineers, Maryland

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Department of Natural Resources, and Maryland State Highway Administration, on October 1, 1987. A summary of that field review is provided in Appendix IX-5.

Wetlands were delineated based on the presence of hydric soils, hydrophytes, and hydrologic characteristics. Soil samples were taken at each wetland and assigned hue, value and chroma utilizing the Munsell Color Chart. The Army Corps of Engineers Region I Plant List was used to determine the indicator status of the vegetation. The U.S. Fish and Wildlife Service's publication "Wetland Plants in the State of Maryland" was used to classify both wetland and non-wetland plants found in the wetland areas. The wetlands were also classified by the Cowardin system (Cowardin et al., 1979).

The wetlands found in the corridor included Palustrine Forested, Emergent and Shrub-Scrub areas and Riverine areas. Many of the wetlands are small drainage channels which are presently in culvert under U.S. Route 1. The widening of U.S. Route 1 would require culvert extensions. The larger riverine areas include Big Gunpowder Falls and Little Gunpowder Falls. Almost all of the wetlands are receiving runoff from U.S. Route 1.

Wetlands are shown on the detailed alternates mapping (Figures II-6 thru II-175. The following data provide indicator status, vegetation and classification data for each wetland identified.

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U.S. Route 1, W-1

Description: Tributary which is in culvert under U.S. Route 1. Wetland is on both east and west sides of U.S. Route 1. There are rock outcrops throughout the area Station 581 (See Figure II-155)

Soils: The soils were predominantly hydric. Some samples were mottled.

| Vegetation: | | Regional Status | ACOE Status |
|-----------------|----------------------------------|--------------------|----------------|
| Sugar Maple | <u>Acer saccharum</u> | FACU | - |
| Red Maple | <u>Acer rubrum</u> | FAC | FAC |
| White Oak | <u>Quercus alba</u> | NA | ? |
| Scarlet Oak | <u>Quercus coccinea</u> | - | - |
| Black Oak | <u>Quercus velutina</u> | - | - |
| Yellow Poplar | <u>Liriodendron tulipifera</u> | FACU | - |
| Black Walnut | <u>Juglans nigra</u> | FACU | - |
| Ashleaf Maple | <u>Acer negundo</u> | FAC+ | FAC+ |
| Speckled Alder | <u>Alnus rugosa</u> | FACW+ | FACW+ |
| Green Ash | <u>Fraxinus pennsylvanica</u> | FACW | FACW |
| American Beech | <u>Fagus grandifolia</u> | FACU | - |
| Sycamore | <u>Platanus occidentalis</u> | F5CW- | FACW- |
| Pignut hickory | <u>Carya glabra</u> | FACU- | - |
| Viburnum | <u>Viburnum spp.</u> | - | - |
| Willow | <u>Salix spp.</u> | - | - |
| Phragmites | <u>Phragmites australis</u> | FACW | FACW |
| Cattail | <u>Typha latifolia</u> | OBL | OBL |
| Multiflora Rose | <u>Rosa multiflora</u> | - | - |
| Greenbriar | <u>Smilax spp.</u> | - | - |
| Dogbane | <u>Apocynum androsacmifolium</u> | - | - |
| Common Burdock | <u>Arctium minus</u> | - | - |
| Common Mullein | <u>Verbascum thapsus</u> | - | - |

Functions: Wildlife Habitat, Flood Desynchronization, Food Chain Support

Hydrologic Source: Upland Runoff, Runoff from Route 1, Flooding

Hydrologic System: Unnamed tributary to Wildcat Branch of Little Gunpowder Falls (MDE Class III)

Wetland Classification: PFO1A 0.413 Ac. Total Area

104

U.S. Route 1, W-2

Description: Small stream and low lying pocket along southbound Route 1. Station 555 SB (See Figure II-15).

Soils: The soils were predominantly hydric. Some sampls were gleyed or saturated.

| Vegetation: | | Regional Status | ACOE Status |
|--------------------|----------------------------------|------------------------|--------------------|
| Red Maple | <u>Acer rubrum</u> | FAC | FAC |
| Red Oak | <u>Quercus rubra</u> | FACU- | - |
| White Oak | <u>Quercus alba</u> | NA | ? |
| American Beech | <u>Fagus grandifolia</u> | FACU | - |
| Sugar Maple | <u>Acer saccharum</u> | FACU | - |
| Greenbriar | <u>Smilax spp.</u> | - | - |
| Christmas Fern | <u>Polysticum acrostichoides</u> | - | - |
| Skunk Cabbage | <u>Symplocarpus foetidus</u> | OBL | OBL |
| Cattail | <u>Typha latifolia</u> | OBL | OBL |

Functions: Wildlife Habitat, Flood Desynchronization, Food Chain Support

Hydrologic Source: Upland Runoff

Hydrologic System: Rocky Branch of Little Gunpowder Falls (MDE Class III)

Wetland Classification:

| | |
|-------|----------------------|
| PFO1A | 0.074 Ac. |
| R3UB1 | <u>0.016 Ac.</u> |
| | 0.090 Ac. Total Area |

U.S. Route 1, W-3

Description: Small stream which runs under Route 1 in culvert. On the east side of Route 1, the channel is concrete-lined. Only the area on the west side was included. Station 532 + 50 (See Figure II-14).

Soils: The wetland soils were predominantly hydric and some samples were saturated.

| Vegetation: | Regional Status | ACOE Status |
|--|----------------------------|------------------------|
| Spotted touch-me-not <u>Impatiens capensis</u> | FACW | FACW |

Functions: Food Chain Support

Hydrologic Source: Upland Runoff

Hydrologic System: Unnamed tributary of the Little Gunpowder (MDE Class III)

Wetland Classification: R4SB2 0.018 Ac. Total Area

106

U.S. Route 1, W-4

Description: Small stream along southbound Route 1. In culvert at U.S. Route 1. On the east side of U.S. Route 1, the channel is concrete lined. Only the area on the west side was included. Station 529 SB (See Figure II-14).

Soils: The wetland soils were predominantly hydric.

| Vegetation: | | Regional Status | ACOE Status |
|---------------------------|------------------------------|------------------------|--------------------|
| Skunk Cabbage | <u>Symplocarpus foetidus</u> | OBL | OBL |
| Spice Bush | <u>Lindera benzion</u> | FACW- | FACW- |
| Poison Ivy | <u>Rhus radicans</u> | - | - |
| Indian Jack-in-the-Pulpit | <u>Arisaema triphyllum</u> | FACW- | FACW- |

Functions: Food Chain Support

Hydrologic Source: Upland Runoff

Hydrologic System: Unnamed tributary of Little Gunpowder Falls (MDE Class III)

Wetland Classification: R4SB2 0.018 Ac. Total Area

107

U.S. Route 1, W-5

Description: The wetland includes Little Gunpowder Falls, part of a tributary, and part of the floodplain. It lies within the state park. Station 523 SB (See Figure II-14).

Soils: The soils were predominantly hydric and some samples were gleyed.

| Vegetation: | | Regional Status | ACOE Status |
|--------------------|------------------------------|------------------------|--------------------|
| White Oak | <u>Quercus alba</u> | NA | ? |
| Red Maple | <u>Acer rubrum</u> | FAC | FAC |
| Sycamore | <u>Platanus occidentalis</u> | FACW- | FACW- |
| White Pine | <u>Pinus strobus</u> | FACU | - |
| American Holly | <u>Ilex opaca</u> | FACU+ | - |
| Skunk Cabbage | <u>Symplocarpus foetidus</u> | OBL | OBL |
| Greenbriar | <u>Smilax spp.</u> | - | - |

Functions: Passive Recreation, Wildlife Habitat, Flood Desynchronization, Food Chain Support

Hydrologic Source: Upland and Highway Runoff, flooding

Hydrologic System: Little Gunpowder Falls (MDE Class III)

| | | | |
|--------------------------------|-------|------------------|------------|
| Wetland Classification: | PFO1A | 0.238 Ac. | |
| | R3UB1 | <u>0.015 Ac.</u> | |
| | | 0.253 Ac. | Total Area |

103

U.S. Route 1, W-6

Description: Low lying pocket adjacent to northbound Route 1. Station 510 NB (See Figure II-14).

Soils: The soils within the wetland area were predominantly hydric.

| Vegetation: | | Regional Status | ACOE Status |
|--------------------|------------------------------|------------------------|--------------------|
| White Oak | <u>Quercus alba</u> | NA | ? |
| Red Maple | <u>Acer rubrum</u> | FAC | FAC |
| Red Oak | <u>Quercus rubra</u> | FACU- | - |
| Hazel Alder | <u>Alnus serrulata</u> | OBL | OBL |
| Skunk Cabbage | <u>Symplocarpus foetidus</u> | OBL | OBL |

Functions: Passive Recreation, Flood Desynchronization

Hydrologic Source: Upland Runoff, Runoff from Route 1

Hydrologic System: Unknown

Stream Classification: N/A

Wetland Classification: PFO1A 0.046 Ac. Total Area

U.S. Route 1, W-7

Description: Small stream. Water from headwater area on west side of Route 1 runs toward Route 1 and is in culvert under Route 1. Station 508 + 80 SB (See Figure II-14).

Soils: The wetland soils were predominantly hydric.

Vegetation:

| | | Regional Status | ACOE Status |
|----------------------|---------------------------|----------------------------|------------------------|
| Spice Bush | <u>Lindera benzion</u> | FACW- | FACW- |
| Spotted touch-me-not | <u>Impatiens capensis</u> | FACW | FACW |
| Poison Ivy | <u>Rhus radicans</u> | - | - |

Functions: Food Chain Support

Hydrologic Source: Upland Runoff

Hydrologic System: Unknown

Wetland Classification: R4SB2 0.039 Ac. Total Area

110

U.S. Route 1, W-8

Description: Tributary running adjacent to southbound Route 1. Area has many rock outcrops. Station 500 SB (See Figure II-14).

Soils: The wetland area soils were predominantly hydric.

| Vegetation: | | Regional Status | ACOE Status |
|-------------------|-----------------------------------|-----------------|-------------|
| Red Oak | <u>Quercus rubra</u> | FACU- | - |
| American Beech | <u>Fagus grandifolia</u> | FACU | - |
| Alt. Leaf Dogwood | <u>Cornus alternifolia</u> | FACU- | - |
| American Hazelnut | <u>Corylus americana</u> | - | - |
| Scarlet Oak | <u>Quercus coccinea</u> | - | - |
| Black Oak | <u>Quercus velutina</u> | - | - |
| Yellow Poplar | <u>Liriodendron tulipifera</u> | FACU | - |
| Christmas Fern | <u>Polystichum acrostichoides</u> | - | - |
| Skunk Cabbage | <u>Symplocarpus foetidus</u> | OBL | OBL |
| Evening Primrose | <u>Oenothera biennis</u> | FACU- | - |
| Multiflora Rose | <u>Rosa multiflora</u> | - | - |

Functions: Wildlife Habitat, Food Chain Support

Hydrologic Source: Upland Runoff, Runoff from Route 1

Hydrologic System: Unknown

Wetland Classification: PFO1A 0.312 Ac. Total Area

111

U.S. Route 1, W-9

Description: Tributary with headwater area west of Route 1. Stream is in culvert under Route 1. Wetland includes two year floodplain. Station 473 + 50 SB (See Figure II-14).

Soils: The soils within the wetland area were predominantly hydric. Some of the samples were mottled.

| Vegetation: | | Regional Status | ACOE Status |
|--------------------|--------------------------------|------------------------|--------------------|
| Yellow Poplar | <u>Liriodendron tulipifera</u> | FACU | - |
| Red Oak | <u>Quercus rubra</u> | FACU- | - |
| Scarlet Oak | <u>Quercus coccinea</u> | - | - |
| Flowering Dogwood | <u>Cornus florida</u> | FACU- | - |
| Alt. Leaf Dogwood | <u>Cornus alternifolia</u> | - | - |
| Sweet Gum | <u>Liquidambar styraciflua</u> | FAC | FAC |
| American Beech | <u>Fagus grandifolia</u> | FACU | - |
| Hickory | <u>Carya spp.</u> | - | - |

Functions: Wildlife Habitat, Flood Desynchronization, Food Chain Support

Hydrologic Source: Upland Runoff

Hydrologic System: Unknown

Wetland Classification: PFO1A 0.062 Ac. Total Area

112

U.S. Route 1, W-10

Description: Small stream which is in culvert under Route 1, just south of Kingsville Pharmacy. Station 412 + 00 NB (See Figure II-13).

Soils: The soils were predominantly hydric. Some of the samples were saturated and mottled.

| Vegetation: | | Regional Status | ACOE Status |
|----------------------|---------------------------|------------------------|--------------------|
| Silver Maple | <u>Acer saccharinum</u> | FACW | FACW |
| Spotted touch-me-not | <u>Impatiens capensis</u> | FACW | FACW |
| Weeping Willow | <u>Salix babylonica</u> | FACW- | FACW- |

Functions: Food Chain Support

Hydrologic Source: Upland Runoff

Hydrologic System: Unnamed tributary of Little Gunpowder Falls (MDE Class III)

Wetland Classification: R4SB2 0.007 Ac. Total Area

U.S. Route 1, W-11

Description: Tributary and a low lying pocket of shrub-scrub area. The tributary is in culvert under Route 1. The wetland is on both the east and west sides of Route 1. Station 380 (See Figure II-12).

Soils: The wetland soils were predominantly hydric.

| Vegetation: | | Regional Status | ACOE Status |
|--------------------|-------------------------------|----------------------------|------------------------|
| Hazel Alder | <u>Alnus serrulata</u> | OBL | OBL |
| Sycamore | <u>Plantanus occidentalis</u> | FACW- | FACW- |
| Willow | <u>Salix spp.</u> | - | - |
| Silver Maple | <u>Acer saccharum</u> | FACU | - |
| Red Maple | <u>Acer rubrum</u> | FAC | FAC |
| Alt. Leaf Dogwood | <u>Cornus alternifolia</u> | - | - |
| Box Elder | <u>Acer negundo</u> | FAC+ | - |
| Sensitive Fern | <u>Onoclea sensibilis</u> | FACW | FACW |

Functions: Wildlife Habitat, Flood Desynchronization, Food Chain Support

Hydrologic Source: Upland Runoff, Runoff from Route 1

Hydrologic System: Unnamed tributary of Big Gunpowder Falls (MDE Class I)

| | | | |
|--------------------------------|-------|------------------|------------|
| Wetland Classification: | PFO1A | 0.138 Ac. | |
| | PSS1C | 0.298 Ac. | |
| | | <u>0.436 Ac.</u> | Total Area |

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U.S. Route 1, W-12

Description: This wetland is a small emergent area at Route 1 and Sherdale Road. A culvert outlets into the area. Station 346 (See Figure II-12).

Soils: The soils within the wetland area were predominantly hydric and some of the samples were mottled or saturated.

| Vegetation: | | Regional Status | ACOE Status |
|--------------------|---------------------------|------------------------|--------------------|
| Cattail | <u>Typha latifolia</u> | OBL | OBL |
| Sensitive Fern | <u>Onoclea sensibilis</u> | FACW | FACW |
| Willow | <u>Salix spp.</u> | - | - |

Functions: Flood Desynchronization, Sediment Trapping, Nutrient Retention

Hydrologic Source: Highway and Upland Runoff

Hydrologic System: Unknown

Wetland Classification: PEM1E 0.080 Ac. Total Area

U.S. Route 1, W-13

Description: Gunpowder Falls. Banks are very steep and no areas above banks are wetlands. The stream flows under a bridge, which will be extended. Station 310 (See Figure II-9).

Soils & Vegetation: None taken, stream only included

Functions: Wildlife Habitat, Food Chain Support

Hydrologic Source: Upland Runoff

Hydrologic System: Big Gunpowder Falls (MDE Class I)

Wetland Classification: R3FL1 0.183 Ac. Total Area

U.S. Route 1, Kingsville By-Pass Option F, KFW-1

Description: A tributary which is in culvert under Route 1. This tributary also comprises Route 1 W-10 (See Figure II-13).

Soils: The soils were predominantly hydric. Some of the samples were gleyed and saturated.

| Vegetation: | | Regional Status | ACOE Status |
|----------------------|---------------------------|------------------------|--------------------|
| Spotted touch-me-not | <u>Impatiens capensis</u> | FACW | FACW |
| Silver Maple | <u>Acer saccharinum</u> | FACW | FACW |

Functions: Food Chain Support

Hydrologic Source: Upland Runoff

Hydrologic System: Unnamed tributary to Little Gunpowder Falls (MDE Class III)

Wetland Classification: R4SB2 0.005 Ac. Total Area

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C. AIR QUALITY

1. Climate and Meteorology

The Climate of the U.S. Route 1 study corridor is known as "continental". The area's weather and climate are dominated by winds moving across the North American continent from a more less westerly direction. Cold air, dominant in winter, generally comes from the northwest, or occasionally, from the north. Warm air masses, dominant in summers, originate in either the southwestern United States and Mexico or the Gulf of Mexico. Annual mean temperature for the area is approximately 55 degrees Fahrenheit. January, generally the coldest month of the year, has a mean temperature of 32 to 33 degrees Fahrenheit, while July, the warmest month, has a mean temperature of about 77 degrees Fahrenheit. The last killing frost is in mid-April, and the first killing frost is in late October. Average annual precipitation in the study corridor is estimated to be 40 to 42 inches. Any month may be the wettest of the year, but August is statistically the month with the heaviest rainfall due to several large storms which occurred in August 1955 and 1971.

The U.S. Route 1 study area is located in the State of Maryland Air Quality Control Area III, which includes Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties (the Metropolitan Baltimore Intrastate Air Quality Control Region). The topography generally allows free air movement with little channeling effects. However, meteorological conditions can occur which are conducive to the accumulation of air pollutants within the region.

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The nearest National Weather Bureau station is located at Baltimore Washington International Airport (BWI), approximately 18 miles southwest of the project site. Statistical records, in the form of monthly and annual wind distribution by six stability classes, for BWI were obtained from the National Climatic Center for the period of January 1969 through December 1973. The most probable condition is stability class "D" (Neutral) with wind out of the west between 11 and 16 Knots (13 to 80 mph).

2. Air Quality

The air pollutants primarily associated with mobile source emissions are hydrocarbons, carbon monoxide, sulphur dioxide, nitrogen dioxide and related photo-chemical oxidants. Due to its predictable dispersion characteristics, carbon monoxide (CO) serves as a good indicator for analyzing air quality impacts. Analysis of CO levels is required by the Federal Highway Administration for all Federally funded highway studies.

The U.S. Route 1 project is within a non-attainment area for photo chemical oxidants. The entire region is subject to transportation control measures such as the Vehicle Emission Inspection Program.

A detailed microscale air quality analysis has been performed to determine the carbon monoxide impact of the proposed project. The results of this analysis is provided in Section IV.

D. **NOISE LEVELS**

In order to determine the acoustic impact of each of the proposed alternates, it was necessary to first monitor ambient noise levels in the study area. Ambient noise is the

background noise that is collectively emitted by the existing noise sources within a given area. The Federal Highway Administration has established, through 23 CFR 771, noise abatement criteria for various land uses. These criteria, along with the associated activity category, are presented in Table III-3. The activity category used for this project is Category B. A total of 22 noise sensitive receptors were identified within the study area. These sites were selected because of their relative proximity to the proposed project alternates. The sites are located on Figure III-8 as well as the detailed alignment maps for each alternate (See Figures II-6 through II-17). Receptor number 1 was eliminated from the analysis due to its purchase by SHA for improvements to the Maryland Route 152 intersection.

Ambient noise measurements were taken in the corridor in October, 1987 and again in January, 1988. The measurements were taken using a Metrosonics db308 Sound Analyzer. This instrument automatically integrates and averages noise levels (8 samples per second) and provides (via an auxiliary printer) a hard copy of all monitored data. The meter was set for 'Slow' response and 'A' weighting.

The length of the monitoring session varied, depending on site conditions. Table III-4 provides a summary of existing noise levels in the corridor. A complete evaluation of existing and proposed noise levels is provided in Section IV.

E. CULTURAL RESOURCES

1. Historic Sites

A total of 19 historic sites, listed in Table III-5, have been identified in the U.S. Route 1 study area. Six of the historic sites (H-4, H-6, H-8, H-10, H-13 & H-15) are

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TABLE III-3

Noise Abatement Criteria and Land Use Relationships
Specified in 23 CFR, 771

| Activity Category | Leq (h) | Description of Activity Category |
|-------------------|---------------|---|
| A | 57 (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) | Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals. |
| C | 72 (exterior) | Developed lands, properties, or activities not included in Categories A or B above. |
| D | --- | Undeveloped lands. |
| E | 52 (interior) | Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums. |

Ward

TABLE III-4
EXISTING NOISE LEVELS

| Site No. | Description | Address | L _{eq} dBA |
|----------|--|---------------------|---------------------|
| 1 | Eliminated from study - purchased by SHA | | |
| 2 | Single family residence | 2800 Belair Road | 68 |
| 3 | Single family residence/park | 12811 Belair Road | 71 |
| 4 | Single family residence/historic site | No Number | 66 |
| 5 | Gremecy day care center | 12505 Belair Road | 65 |
| 6 | Single family residence | 12001 Belair Road | 61 |
| 7 | St. John's Church/historic site | 11905 Belair Road | 62 |
| 8 | Lassahn's Funeral Home/historic site | 11750 Belair Road | 64 |
| 9 | Single family residence | 7424 Bradshaw Road | 53 |
| 10 | Single family residence | 11601 Belair Road | 62 |
| 11 | Single family residence/historic site | 11501 Belair Road | 61 |
| 12 | Single family residence | 208 Sheradale Drive | 62 |
| 13 | Single family residence | 11252 Belair Road | 70 |
| 14 | Single family residence/historic site | 7027 Mt. Vista Road | 58 |
| 15 | Park | No Number | 63 |
| 16 | Perry Hall United Methodist Church | 9513 Belair Road | 62 |
| 17 | Library (Perry Hall Branch) | 9440 Belair Road | 65 |
| 18 | St. Michael Lutheran Church | 9534 Belair Road | 62 |
| 19 | Single family residence | 9127 Belair Road | 65 |
| 20 | Perry Hall Elementary School | No Number | 61 |
| 21 | Perry Hall Presbyterian Church | 8848 Belair Road | 66 |
| 22 | Single family residence/office | 8715 Belair Road | 57 |

Note: 67 dBA is the Federal Highway Administration Noise Abatement Criteria

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TABLE III-5
Historic Sites

| <u>Site No.</u> | <u>MHT No.</u> | <u>Name</u> | <u>Address (Mapping Figure)</u> | <u>Level of Significance</u> |
|-----------------|----------------|---|--|--|
| H-1 | - | Frame Dwelling | W. Side of U.S. 1 Just N. of Junction with Joppa Road | MD Inventory Quality (M.I.) |
| H-2 | - | Frame Dwelling | W. Side of U.S. 1 Just N. of Junction with Joppa Road | M.I. |
| H-3 | - | Row of Frame Structures | W. Side of U.S. 1 just N. of Junction with Joppa Road | M.I. |
| H-4 | BA907 | Baltimore Em- broidery Co. | 96 21 U.S. 1 (Fig. II-10) | National Register Eligible (N.R.E.) |
| H-5 | BA2308 | Dietz's Nursery | | M.I. |
| H-6 | BA238 | Heathcote | 7027 Mount Vista Road (Fig. II-12) | N.R.E. |
| H-7 | BA2309 | Quinlan School | E side of U.S. 1 | M.I. |
| H-8 | BA2303 | Gorsuch-Wilson House | 11501 U.S. 1 (Fig. II-12) | N.R.E. |
| H-10 | BA243 | Day-Deans-King House (Lassahn Funeral Home) | 11750 U.S. 1 (Figs. II-13,16,17) | N.R.E. |
| H-11 | BA2310 | Jailhouse | West side of U.S. 1 across from 11807 U.S. 1 | M.I. (Demolished) |
| H-12 | BA239 | Frame Dwelling - "Freedmans Bureau" | 11807 U.S. 1 | M.I. |
| H-13 | BA132 | St. John's Church | U.S. Route 1 at Kingsville Crossroads (Figs. II-13,16,17) | N.R.E. |

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TABLE III-5 (Continued)

Historic Sites
(Continued)

| <u>Site No.</u> | <u>MHT No.</u> | <u>Name</u> | <u>Address (Mapping Figure)</u> | <u>Level of Significance</u> |
|-----------------|----------------|--|---------------------------------|------------------------------|
| H-14 | BA244 | Fluharty's Folly | Jerusalem Rd. 12001 U.S. 1 | M.I. |
| H-15 | BA1182 | St. Paul's Church | (Figs. II-13,16,17) | N.R.E. |
| H-16 | - | Frame Dwelling | 12201 U.S. 1 | M.I. |
| H-17 | - | Frame Dwelling | 12320 U.S. 1 | M.I. |
| H-18 | - | Frame Dwelling | E. Side of U.S. 1 | M.I. |
| H-19 | - | Bagley Tenant House (1st part 19th C, addition 1950) | E. Side of U.S. 1 | M.I. |

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eligible for the National Register of Historic Places.
These sites are more fully described below:

H-4 Baltimore Embroidery Company (BA 907)

This long, one story brick building is significant as a family owned business which was started in 1915. The original embroidery machines imported from Germany are still in use today.

H-6 Heathcote (BA 238)

This large Victorian frame house, built in the 1890's, is significant for its architecture, as well as for its association with the history of the area, having been the home of the Quinlan family, owners of considerable property in the region.

H-8 Gorsuch-Wilson House (BA 2303)

This very large, well preserved stone house, which is architecturally significant, was built in the 1870's for the Gorsuch family - descendants of one of the earliest settlers of Baltimore County.

H-10 Days-Deans-King House (BA 243)

This very large stone building, now the Lassahn Funeral Home, evolved over the last 250 years, as its owners gradually expanded it. Used as a residence in the 18th century, it was converted to use as the Kingsville Inn in 1915 to serve the motoring public.

H-13 The St. John's Churches (BA 132)

This stone, stuccoed church was built in 1817 for St. John's Parish to replace the declining church in Joppatowne. A newer stone church, which was constructed close to the original structure, is also architecturally significant.

These parishes are significant historically as the seat of one of the oldest episcopal parishes in Harford County. In addition, they are architecturally significant as two, distinguished stone ecclesiastical structures. The earliest one, a simple boxy church, was built in the early nineteenth century and was joined by the more elaborate Gothic Revival example built near the end of the century.

H-15 St. Paul's Church (BA 1182)

This frame structure, evoking the Gothic Revival Style, was built in the early twentieth century to replace the original church. It is significant for its well realized architectural style.

The six sites that are considered to be possibly eligible for the National Register of Historic Places are identified on the detailed plans shown on Figures II-6 through II-17.

2. Archaeological Sites

The Division of Archaeology, Maryland Geological Survey, conducted a Phase I archaeological reconnaissance of the project area. Ten sites were identified, three of which are prehistoric (18BA335, 336, 337), five which are

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historic archaeological sites (18BA338, 339, 340, 341, and 18HA 173) and two which are mixed historic/prehistoric sites (18BA334 and 18BAX202). In addition, seven low density artifact scatters were identified (18BA203, 204, 205, 206, 207, 208, and 18HAX20).

Two of the archaeological sites may be eligible for the National Register of Historic Places. Thus, Phase II testing may be warranted to determine their eligibility if the sites cannot be avoided. These sites are:

18BA334, May include a prehistoric seasonal base camp component which may yield information about site function and regional settlement patterns. It is recommended that this site be protected by fencing and avoided during construction. The importance of the site is associated with the information it contains. It is not important that it be preserved in place, as long as the information it contains is scientifically removed prior to construction.

18BAX202, May represent activities related to a nineteenth century tannery. It is recommended that this site be avoided during construction. (The site is outside the construction zone. See Section IV-F, Impacts on Historic and Archaeological Sites.)

The September 1, 1988 letter of the SHPO is included in the Comments and Coordination Section. The March 8, 1988 executive summary of the reconnaissance is also included in the Comments Section (Section VII).

IV. ENVIRONMENTAL CONSEQUENCES

IV. ENVIRONMENTAL CONSEQUENCES

A. SOCIAL AND ECONOMIC

1. Social Impacts

a. Residential Displacement and Relocation Availability

Residential displacement is based upon preliminary relocation studies conducted by SHA. The preliminary relocation report is available for examination at the offices of the State Highway Administration, 707 North Calvert Street, Baltimore, Maryland. A summary of the relocation assistance program of the Maryland State Highway Administration is found in Appendix IX-6.

All relocations will be carried out in accordance with the requirements of the Uniform Relocation Assistance and Land Acquisition Policies Act of 1970 (Public Law 91-646) and S.T.U.R.A.A. of 1987 (Public Law 100-17). These acts require that relocations be effectuated in a timely and humane fashion. It is estimated that a lead time of approximately 12 to 24 months would be needed prior to construction to complete the relocation plan.

A review of local newspapers and Multiple Listing Services indicated that there should be adequate replacement housing available and within the means of all of the families.

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No Build Alternate

No relocations or displacements would occur under the No Build Alternate.

Six Lane Alternate

Twenty-two (22) residential units, occupied by approximately twenty-two (22) families would be acquired under the Six-Lane Alternate (Assuming Kingsville Option B). With Kingsville Option E Modified, the Six-Lane Alternate would require twenty-one (21) residential units occupied by approximately twenty-one (21) families. With Kingsville Option F, the Six-Lane Alternate would acquire twenty-one (21) residential units occupied by approximately twenty-one (21) families. Approximately two-thirds of the families potentially displaced are owners and the remaining one-third are tenant displacements. The locations of the impacted residences are indicated on the detailed plans.

b. **Access to Community Facilities**

No Build Alternate

Under the No Build Alternate, traffic congestion will continue to worsen and will seriously interfere with access to community facilities for motorists and pedestrians.

Six-Lane Alternate

Under the Six-Lane Alternate, access to community facilities will be enhanced throughout most of the study corridor through the design year.

Along some portions of the Six-Lane Alternate, median barriers are being proposed to promote traffic safety. As a result, access from some residences to community facilities may be affected due to the need to make U-turns at designated median crossings.

c. **Disruption of Neighborhoods and Communities.**

No Build Alternate

Disruption of neighborhoods and communities will occur under the No Build Alternate as a result of diversion of vehicles from U.S. Route 1 to local parallel streets. This will be an especially acute problem for Snyder Lane, Cross Road and Carlisle Avenue.

Six-Lane Alternate

The Six-Lane Alternate will not physically divide communities, however, it changes their appearance, especially in the Perry Hall and Kingsville Communities. In order to widen U.S. Route 1 to six lanes, as many as 25 homes must be taken in these two communities. Community facilities will not be adversely impacted by the Six-Lane Alternate.

In addition, the Six-Lane Alternate will create some adverse travel due to the grass median and will also require the felling of the oak trees in Perry Hall.

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d. **Effects on Minorities, Handicapped, and Elderly Persons**

No known groups of minorities, handicapped or elderly persons are expected to be displaced under any of the alternatives.

2. **Parks and Recreation Impacts**

None of the recreation areas associated with the public schools in the project area would be impacted by the proposed widening of U.S. Route 1.

Gunpowder Falls State Park would be affected in two locations by the proposed widening. These areas would be at the Big Gunpowder Falls and Little Gunpowder Falls crossings. New structures would be required at both crossings with the six lane alternate. Under the No Build Alternate, no improvements will be made to the existing roadway. Normal maintenance and spot safety improvements would be undertaken. This alternate would not provide any improvement to traffic safety and traffic capacity.

Construction of the Big Gunpowder Falls crossing would require approximately 11.6 acres of right-of-way from Gunpowder Falls State Park. Construction of the Little Gunpowder Falls crossing would require approximately 6.4 acres of right-of-way from Gunpowder Falls State Park. All right-of-way and slope easements from the Park would be acquired in fee simple. A more detailed discussion of impacts to the Gunpowder Falls State Park crossing is included in the Section 4(f) Evaluation, Section V.

3. Economic Impacts

a. Business Displacement and Relocation

No Build Alternate

No relocations or displacements would occur under the No Build Alternate.

Six-Lane Modified Alternate

A total of sixty (60) businesses would be acquired by the Six-Lane Alternate, assuming use of Kingsville Option B.

The Six-Lane Alternate with Kingsville Option E Modified would acquire fifty-seven (57) businesses. Under Option F fifty-two (52) businesses would be acquired.

The types of businesses potentially impacted by this project include:

- 33% automobile-related businesses (including service stations, car dealers, repair shops, etc.)
- 47% small merchants
- 9% multi-business buildings
- 7% taverns/restaurant
- 2% doctor's office
- 2% motel

Based upon a visual survey, the number of employees potentially affected by the acquisition of the above referenced businesses total approximately 275. Of

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these employees approximately 10% or approximately 30 are minority group members.

Based upon information from the U.S. Census Bureau, relatively few businesses in Baltimore County are minority owned. The data also indicates that most of the employees in the service oriented, displaced businesses should have no problem in obtaining new employment, if necessitated.

There may not be sufficient replacement business sites available to accommodate all the businesses displaced. Small tenant businesses may have a difficult time in finding affordable replacement locations. The only adverse impact to the adjacent communities along the U.S. Route 1 corridor will be the potential loss of many service oriented businesses.

No hazardous waste sites are known to exist in the project corridor. Service stations represent a potential source of ground water contamination and all service stations acquired would be tested for soil contamination. Many stations are replacing USTs (underground storage tanks) under EPA's and the Maryland Department of the Environment's UST programs.

b. Effect of Regional Business Activities

No Build Alternate

The No Build Alternate does not provide the relief from traffic congestion needed in the corridor. This alternate will, therefore, have a negative impact on regional business activity.

Six-Lane Modified Alternate

Under the Six-Lane Alternate, corridor access will be improved to an adequate level of service through the design year. While the short term loss of local businesses would be severe under this alternate, the long term benefit to the regional economy would be significant. The exception to this assessment may be

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Kingsville. The lack of public water and sewer may inhibit the redevelopment of this area by new business ventures.

c. Effect on Tax Base

The removal of residential and business property from the tax base of the counties involved will have some impact on the revenue collected; however, since Baltimore and Harford Counties have relatively large tax bases, the impact is expected to be minimal. In addition, there may be a long term net increase in the tax base as re-development and new development occurs in the corridor.

d. Effect on Local Business Access

No Build Alternate

Local businesses will continue to have almost unlimited access to U.S. Route 1 under the No Build Alternate. However, existing and future traffic congestion may have a negative affect on accessibility.

Six-Lane Modified Alternate

The project planning team has worked extensively with the Citizen Advisory Committee to reduce impacts to business accessibility. Specific areas of concern, such as truck turning movements, have been identified. Median crossovers and/or left turn lanes have been provided as needed. Where crossovers are not feasible, businesses will at least have right-in/right-out access. Construction of this project may

have a temporary impact on accessibility; however, long term impacts should be minimal.

4. Title VI Statement

"It is the policy of the Maryland State Highway Administration to insure compliance with the provisions of Title VI of the Civil Rights Act of 1964 and related civil rights laws and regulations which prohibit discrimination on the grounds of age, sex, race, color, religion, national origin, physical or mental handicap in all State Highway 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 provisions of relocation advisory assistance. This policy has been incorporated into all levels of the highway planning process in order that proper consideration be given to the social, economic and environmental effects of all highway projects. Alleged discrimination actions should be addressed to the Equal Opportunity Section of the State Highway Administration for investigation."

5. Land Use Planning Impacts

The Baltimore County Master Plan supports urbanization of the Whitemarsh/Perry Hall area along with improvements to the public facilities in the area, including new highways and improved existing facilities. Improvements to U.S. Route 1, between I-695 and Forge Road, are identified in the Plan as a short range highway need.

The Harford County Master Plan supports intense development of Fallston - specifically the area near the U.S. Route 1/MD Route 152 intersection. Improvements to U.S. Route 1 are identified as a primary non-critical highway need.

The proposed improvements to U.S. Route 1 are needed to accommodate future growth and to relieve existing

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traffic. The U.S. Route 1 project is, therefore, consistent with local or State land use planning goals.

Although this project will enhance operational characteristics of U.S. Route 1, it is not expected to place additional development pressure on low growth areas adjacent to Gunpowder Falls State Park. Development of these areas will continue to be controlled by a lack of water and sewer service as well as the restrictive zoning classifications.

B. TRANSPORTATION

Tables IV-1 and IV-2 provide a summary of the levels of service for intersections and mid-block roadway segments within the corridor. As indicated in Table IV-1, all intersections, with the exception of Mount Vista Road, will fail in the design year with a No Build scenario. Even with a Six-Lane Alternate, several intersections will still be at unacceptable Levels of Service.

With the No Build Alternate, the U.S. Route 1 mainline would fail for the entire section with the year 2015 design year traffic volumes. A Six-Lane Alternate would provide an acceptable Level of Service in the design year. Projected turning movements indicate that interchanges are warranted at the U.S. 1/Silver Spring Road and U.S. 1/ Maryland Route 152 intersections. For this reason, the geometrics illustrated in the Six-Lane Alternate for the intersection of U.S. Route 1 with MD Route 152 represent an interim condition. The proposed geometrics should accommodate traffic demand until the year 1995 at which point, it is conceivable that an interchange would need to be constructed. Such an interchange is being considered as part of the Maryland 152

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TABLE IV-1

Level of Service - Intersections

| <u>Intersection</u> | <u>No Build Alternate 2015</u> | | <u>Six-Lane Alternate 2015</u> | |
|--|--------------------------------|-----------|--------------------------------|-----------|
| | <u>AM</u> | <u>PM</u> | <u>AM</u> | <u>PM</u> |
| | U.S. 1/MD 152 | F | F | C |
| U.S. 1/Sunshine Blvd/ Bradshaw Road | F | F | C | D |
| U.S. 1/Mt. Vista Road | B | C | A | A |
| U.S. 1/Honeygo Blvd/ Gunview Road | N/A | N/A | C | D |
| U.S. 1/Forge Road | C | E | A | B |
| U.S. 1/Chapel Road/ Baker Lane | F | F | C | D |
| U.S. 1/Joppa Road ("T") | F | F | C | D |
| (1) U.S. 1/Joppa Road/India Ave. | N/A | N/A | C | D |
| U.S. 1/Ebenezer Road | F | F | E | F |
| U.S. 1/Silver Spring Rd. | F | F | F | F |

(1) Assumes realignment of offset T's to provide one four-legged intersection

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TABLE IV-2

Level of Service Summary - Roadway Segments

| Section | | No Build L.O.S. AM/PM | 6-Lane L.O.S. AM/PM |
|---------------------------------------|----------|-----------------------------|---------------------------|
| Joppa 'T' to Perry Hall Road | NB SB | C/F F/D | B/D D/B |
| Perry Hall Road to Sheradale Drive | NB SB | D/F F/E | B/C C/B |
| Sheradale Drive to New Cut Road | NB SB | B/E D/B | A/B B/A |
| New Cut Road to Reckord Road | NB SB | B/F E/E | A/C B/B |
| Reckord Road to MD 152 | NB SB | B/F C/E | A/D B/B |

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widening project which is in the initial stages of project development. Right-of-way constraints and community opposition preclude consideration of an interchange at the intersection of U.S. Route 1 and Silver Spring Road.

C. NATURAL ENVIRONMENT

1. Effects on Topography, Geography and Soils

No Build Alternate

Under the No Build Alternate, there will be no effects to topography, geology or soils.

Six-Lane Alternate

Due to inadequate sight distance along portions of U.S. Route 1, the Six-Lane Alternate will require the modification of the existing profile. This would occur north of Silver Spring Road, near Mt. Vista Road, north of Sunshine Avenue and both Park crossings. The total amount of cut for the Six-Lane Alternate is approximately 1,125,000 cubic yards. Approximately 300,000 cubic yards of embankment will be required. Bedrock outcrops in the vicinity of the river crossings will require blasting. The location and extent of such rock excavation will be determined during final design following detailed soil borings and analysis. Blasting will be conducted in accordance with SHA specifications.

Appropriate erosion and sediment control and stormwater management measures will be stringently employed, as required by the State Highway Administration and the Maryland Department of the Environment. Fugitive dust will be controlled by revegetation and by use of water or

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hygroscopic chemicals on unpaved roads during dry weather construction.

2. Water Quality Impacts

a. Surface Water

Highway run-off is a potential source of pollutants to surface water resources. The constituents of run-off may include solids, nutrients, salts, heavy metals, oil and grease, organics and other substances.

The impacts of run-off depend largely on the site condition and the run-off-event. Other factors such as highway type, Average Daily Traffic (ADT), climatic conditions and the drainage area of the receiving body of water influence the magnitude of any potential impacts. For example, with respect to ADT, run-off from high volume highways (Winters and Gidley, 1980, {185,000 ADT}; Portele et al., 1982, 50,000 ADT) had toxic effects on the biota whereas run-off from rural, low ADT highways (Dupuis et al., 1984) generally had no significant impacts to aquatic biota.

The Federal Highway Administration has published a screening procedure to determine potential highway runoff problems (Burch et al., 1985). According to this procedure and if public water supplies are not involved (the Gunpowder watershed is a source of public water upstream), then highway run-off will probably not have an adverse effect if one or more of the following conditions is met:

- 1) ADT for the highway is less than 30,000, or

- 2) Overland flow or grassed channels 200 feet in length are utilized to transport highway run-off before it is discharged to receiving water, or
- 3) The cumulative impervious roadway surface/total watershed area ratio is less than 0.01. This assumes a dilution ratio of 100:1 and that it is sufficient to protect aquatic life. This assumption is based on a worst-case situation where pollutant concentration are comparable to the LC50 (Lethal Concentration for 50% of the individuals tested) values. It is common practice to protect aquatic life by limiting receiving water concentration to 0.01 LC50 (Horner and Mar, 1982).

The above screening procedure was applied to the U.S. Route 1 study at the Big Gunpowder, Little Gunpowder and Wildcat Branch crossings. The first condition is not applicable to the study because the ADT will increase in the year 2015 to 43,000 vehicles per day (at the stream crossings) for each alternate including the No Build. With respect to the second condition, U.S. Route 1 currently allows for overland flow. However, future conditions for the build alternatives will place curbing and inlets to collect the run-off. This drainage system rules out the second condition.

Finally, the third condition indicates that if the ratio of impervious roadway surface/total watershed area is less than 0.01, then the highway run-off will be diluted by the receiving water by a factor of 100:1. If this occurs, then it is unlikely that the run-off will have a significant impact. The

following table provides the results of the ratio analysis:

TABLE IV-3
Ratio of Impervious Roadway Surface to
Total Watershed Area

| <u>Alternate</u> | <u>Big Gunpowder</u> | <u>Little Gunpowder</u> | <u>Wildcat Branch</u> |
|------------------|----------------------|-------------------------|-----------------------|
| No Build | 0.0001 | 0.0002 | 0.0013 |
| Six-Lane | 0.0001 | 0.0004 | 0.0027 |

Based on this analysis and the above discussion, significant highway run-off impacts occurring from the Build Alternate or the No Build Alternate are not anticipated.

Final design for the selected alternate will include plans for grading, erosion and sediment control, and stormwater management, in accordance with the State and County regulations. Review and approval of these plans by the Maryland Department of Natural Resources, Water Resources Administration, Sediment and Stormwater Division, will be required.

The project will be designed in accordance with the Storm Water Resources Administration's regulations 0.01.10 Comar 08.05.05 "Storm Water Management", effective July 1, 1984, which require water quality to be addressed in final design. These regulations stipulate that the order of preference for stormwater management is as follows:

- 1) Infiltration of runoff on site.

- 2) Flow attenuation by use of open vegetated swales and natural depressions.
- 3) Stormwater retention structures.

b. Groundwater

It is not anticipated that the proposed construction would have an adverse effect upon the quantity of water in the wells in the Piedmont formation or in the pore space of the recrystallized metamorphic rock. These wells obtain water from aquifers which transmit groundwater from relatively distant and widespread areas. Therefore, the very localized activities of the proposed construction should have very little effect on wells which use those aquifers.

3. Stream Modifications

Stream modifications (re-alignment, channelization, etc.) would not be required for the Build Alternate. The Build Alternate, however, will involve three (3) major stream crossings: Big Gunpowder Falls, Little Gunpowder Falls and Wildcat Branch. In addition, several smaller tributaries and swales will be crossed by the Build Alternate. These crossings are indicated on the detailed plans. For the purpose of this analysis, it has been assumed that a box culvert would be used for the Wildcat Branch crossing and bridge structures would be used for both the Gunpowder Falls and the Little Gunpowder Falls crossings. Appropriate drainage structures would be incorporated into the final design of these crossings. There would be no new stream crossings with the Build Alternate.

The stream crossings would require Waterway Construction Permits from the Maryland Department of Natural Resources, Water Resources Administration and possibly Section 404 permits from the U.S. Army Corps of Engineers.

4. Effects on Coastal Resources

Consistency with the Maryland Coastal Zone Management Program has been a goal of this study. The concerns of the program have been a consideration throughout the development of this project, and coordination has been undertaken with the Coastal Resources Division (CRD), Tidewater Administration, Maryland Department of Natural Resources. A representative of Maryland Department of Natural Resources participated in the October 1, 1987 wetlands field review, and Coastal Resource impacts were discussed.

Copies of this Draft Environmental Document were forwarded to the appropriate agencies within Maryland Department of Natural Resources for review and comment.

5. Effects on Wetlands

Pursuant to Executive Order 11990 and Section 404 of P.L. 92-500, wetland areas potentially affected by the proposed project were identified. As indicated in Section III Affected Environment, the wetlands were identified and staked in the field. An agency field review was conducted on October 1, 1987 with the Army Corps of Engineers, Maryland Department of Natural Resources and MD State Highway Administration to verify the limits of the identified wetlands. The limits of each wetland is shown on the detailed plans. Table IV-4 summarizes the amounts of wetlands affected by each alternate.

TABLE IV-4
Wetlands Summary
Encroachment Areas (Acres)

| <u>Wetland</u> | <u>Encroachment</u> |
|-------------------|---------------------|
| W1 | 0.4 |
| W2 | 0.1 |
| W3 | 0.1 |
| W4 | 0.1 |
| W5 | 0.2 |
| W6 | 0.1 |
| W7 | 0.1 |
| W8 | 0.3 |
| W9 | 0.1 |
| W10 | > 0.1 |
| W11 | 0.2 |
| W12 | 0.1 |
| W13 | 0.2 |
| KFW1 ¹ | > 0.1 |
| TOTAL | 1.5 |

¹ Kingsville Option 'F'

In order to avoid adverse impacts to wetlands and reduce the amount of right-of-way required for the U.S. Route 1 widening, cross-section widths were reduced to a minimum. Making slopes steeper than 2:1 or the use of retaining walls to further reduce wetland impacts is not a viable alternative because of soil limitations and costs.

Avoidance alternatives were considered for each wetland but were found to be impractical due to additional right-of-way requirements, residential and business displacements, alignment problems, or further wetland impacts. Wetland W1 lies on both sides of existing U.S. Route 1 and can not be avoided by a realignment of the road. Missing Wetland W2 would require the displacement of an office building and a school and office supply company. The avoidance of Wetlands W3 and W4 would

require 1.15 more acres of right-of-way impacts in the Park. Wetland W5 lies on both sides of existing U.S. Route 1 and the roadway must tie into the existing bridge structure therefore the wetland cannot be avoided. Avoiding Wetland W6 would require 1.72 more acres of right-of-way for the cut slope within the Park and increase the impacts to W7. Missing W7 would increase the impacts to W6. The avoidance of W8 would require the displacement of an auto repair shop and a tavern. The avoidance of W9 would require the displacement of four additional residences. Wetland W10 lies on both sides of existing U.S. Route 1 and cannot be avoided. Wetland W11 also lies on both sides of existing U.S. Route 1 and cannot be avoided. Widening all to the west to minimize impacts to Wetland W11 is not possible because of residential and commercial displacement through Kingsville. Avoiding will require the taking of the Days-Dean-King historic site. The avoidance of Wetland W12 would require the displacement of two residences. W13 lies on both sides of existing U.S. Route 1 and cannot be avoided.

The wetlands impacted by this project are, primarily, upland runoff type wetlands. The wetland mitigation will be consolidated on a 1:1 basis into one or two replacement sites within the Gunpowder Falls watershed. The wetland mitigation will be composed of replacement or enhancement and will be developed in detail during design and in coordination with appropriate review agencies. This consolidation process will produce larger wetlands with greater overall value.

Wetland Finding

In accordance with Executive Order 11990, efforts were made to avoid and minimize harm to wetlands in the study corridor. These efforts included slight alignment shifts

and cross section reduction (through the use of curb and gutter). As discussed above, there are no practical alternatives that would completely avoid construction in wetlands and still satisfy the proposed project need. The Selected Six-Lane Modified Alternate includes all practical measures to minimize harm to the wetland. Construction of the Six-Lane Alternate will be staged, initially affecting a lesser amount of wetland area.

6. Flood Hazard Elevation

The 100 year floodplains for the Big Gunpowder, Little Gunpowder and Wildcat Branch were determined (See Section III, Affected Environment) and plotted on detailed plans (Figures II-6 thru II-17). The profile grade elevation for the Six-Lane Alternate was set to eliminate flooding by a 100 year frequency storm. Structure openings will be designed to accept stormwater without increasing backwater elevations for the 100 year event; therefore, no upstream structures will be impacted. Structure elevations and openings will be refined during final design based upon field surveys.

Some encroachments on the 100 year floodplain due to the placement of additional fill material near the stream crossings are unavoidable. It is estimated that the Six-Lane Alternate would encroach upon approximately 1.5 acres of the 100 year floodplain. All crossings are at 90° to the streams in question.

In accordance with the requirements of Executive Order 11988, the impacts of each encroachment were preliminarily evaluated to determine their significance. A significant encroachment would involve one of the following:

- a. High probability of loss of human life

- b. Likely future damage that could be substantial in cost or disruption
- c. Disruption of an emergency or evacuation route
- d. Notable adverse impact on "natural and beneficial floodplain values"
- e. Encouragement of further growth in the floodplain

Since this project does not involve any of the above issues, no significant floodplain impacts are expected to occur as a result of any of the alternates under consideration.

All actions taken with respect to construction within floodplains will conform to Executive Order 11988, DNR/WRA Regulations Governing Construction in Non-Tidal Waters and Floodplains.

Use of the most advanced sediment and erosion control techniques and stormwater management controls available will ensure that none of the encroachments will result in risks or impacts to the beneficial floodplain values. Furthermore, it is anticipated that this project will not provide direct or indirect support to further development within the floodplain. Preliminary analysis, in accordance with Executive Order 11988, indicates that no significant floodplain impacts are expected to occur as a result of this project.

7. Effects on Terrestrial and Aquatic Habitat

As indicated in Section III, most of the habitat along U.S. Route 1 has been converted to urban uses (man dominated). The proposed alternates will, however, affect wildlife habitat in undeveloped areas, such as

parkland and fields. Most of the hardwood forest habitat would be taken through the Park crossings. Table IV-5 summarizes the loss of habitat resulting from the Six-Lane Alternate.

TABLE IV-5
HABITAT LOSSES (AC)

| Alter- nate | Kings- ville Option | Vegetation | | | | Shrub Vege- tation |
|----------------|---------------------------|-----------------------|-------------------------|-------------------|--------------------|--------------------------|
| | | Man Domi- nated | Hard- wood Forest | Agri- cultural | Abandoned Field | |
| 6L | B | 49.03 | 31.09 | 4.97 | 0.73 | 5.66 |
| 6L | E Mod. | 47.96 | 30.02 | 4.97 | 0.73 | 5.66 |
| 6L | F | 51.4 | 40.44 | 4.97 | 1.35 | 5.86 |

The loss of habitat should be accompanied by a proportional loss in wildlife populations inhabiting these areas based upon its holding capacity. Since this habitat is located, for the most part, in close proximity to the existing roadway, fewer numbers of animals would be expected to tolerate these areas. All parkland (hardwood forest) would be replaced and therefore protected from future development.

The various stream crossings proposed by the project alternates have the potential for impacting aquatic and riparian habitats. Strict enforcement of 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 reach the riparian and stream habitats. These control measures should reduce the potential adverse impacts to aquatic and semi-aquatic life.

The red oak canopy along U.S. Route 1 through Perry Hall, discussed previously, would be lost under the Six-Lane Alternate.

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8. Effects on Threatened or Endangered Species

Correspondence with the U.S. Fish and Wildlife Administration and the Maryland Department of Natural Resources indicates that there are no known populations of threatened or endangered species in the study area (See Section VII).

9. Prime Farmlands

Prime Farmlands were identified through the use of Soil Conservation Service (SCS) prime farmland soils mapping units and the Soil Surveys for Baltimore and Harford Counties.

The Six-Lane Alternate will require the "conversion" of approximately 11.4 acres of prime farmland soils and 14.8 acres of statewide important farmland soils. Of these totals, approximately 40% of the areas have already been converted to urban land uses, 30% lie within the state park boundaries, and 30% is used as pasture and cropland. Only 5.8% of the prime farmland soils and none of the statewide important farmland soils lie within areas zoned for agricultural protection in the corridor.

Coordination with the Soil Conservation Service is being conducted to comply with the Farmland Protection Policy Act. Completed Forms 4D-1006 were submitted to SCS (Baltimore and Harford County). Copies are provided in Appendix IX-7.

D. AIR QUALITY

1. Receptor Sites Description

A total of 21 air and noise sensitive receptors were identified in the project corridor. These sites were selected because of their relative proximity to the proposed project alternates. (Receptor number 1 was eliminated from the analysis due to its purchase by SHA for intersection improvements at Maryland Route 152). Table IV-6 describes the location of each identified receptor. Those receptors are also shown on Figures II-6 thru II-17.

2. Results of Microscale Analysis

Shown on Table IV-7 is the one-hour and eight-hour CO concentrations for the Six-Lane Alternate for the estimated time of completion date (ETC), 1995 and the design year 2015. No violations were identified for either CO analysis. The highest concentrations occurred at receptors 21 and 22. These receptors are located at the southern terminus of the study and situated between Silver Spring Road and Joppa Road/Ebenezer Road. High traffic volumes in this area reduce operating speeds, therefore increasing emissions.

One and eight-hour CO concentrations were calculated for Kingsville Option 'F'. Of the three Kingsville Options, only Option 'F' alters the alignment of U.S. Route 1 significantly from that of the Six-Lane Alternate. Results of the one and eight-hour CO analysis for this option are shown in Table IV-8. No violations were identified.

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TABLE IV-6
U.S. ROUTE 1
RECEPTOR DESCRIPTIONS

| <u>Receptor #</u> | <u>Station</u> | <u>Offset Centerline U.S. 1</u> | <u>Figure</u> | <u>Description</u> |
|-------------------|----------------|---------------------------------|---------------|---|
| 2 | 562+25 | 80' L | II-13 | Single Family Residence |
| 3 | 516+51 | 105' R | II-12 | Single Family Residence |
| 4 | 536+57 | 140' R | II-13 | Single Family Residence and Historic Site |
| 5 | 485+45 | 140' R | II-12 | Gremecy Day Care Center |
| 6 | 434+85 | 150' R | II-11 | Single Family Residence |
| 7 | 423+60 | 170' R | II-11 | St. John's Church and Historic Site |
| 8 | 408+62 | 130' L | II-11 | Lassahn's Funeral Home and Historic Site |
| 9 | 415+20 | 460' R | II-11 | Single Family Residence |
| 10 | 389+90 | 160' R | II-10 | Single Family Residence |
| 11 | 368+80 | 260' R | II-10 | Single Family Residence and Historic Site |
| 12 | 339+80 | 210' R | II-10 | Single Family Residence |
| 13 | 342+00 | 140' L | II-11 | Single Family Residence |
| 14 | 351+51 | 370' L | II-10 | Single Family Residence and Historic Site |
| 15 | 314+00 | 120' L | II-9 | Gunpowder Falls State Park |
| 16 | 216+91 | 150' R | II-8 | Perry Hall United Methodist Church |
| 17 | 209+02 | 90' L | II-8 | Library (Perry Hall Branch) |
| 18 | 224+10 | 120' L | II-8 | St. Michael's Lutheran Church |
| 19 | 179+65 | 125' R | II-7 | Single Family Residence |

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TABLE IV-6 (Continued)

U.S. ROUTE 1
RECEPTOR DESCRIPTIONS

| <u>Receptor #</u> | <u>Station</u> | <u>Offset Centerline U.S. 1</u> | <u>Figure</u> | <u>Description</u> |
|-------------------|----------------|---------------------------------|---------------|--------------------------------|
| 20 | 171+80 | 240' R | II-7 | Perry Hall Elementary |
| 21 | 154+14 | 100' L | II-7 | Perry Hall Presbyterian Church |
| 22 | 133+98 | 140' R | II-7 | Single Family Residence |

TABLE IV-7

U.S. ROUTE 1
6-Lane Alternate
CO CONCENTRATIONS * AT EACH SITE, IN PPM

| Receptor # | 1995 | | | | 2015 | | | | NAAQS | |
|------------|----------|-------|--------|-------|----------|-------|--------|-------|-------|-------|
| | No Build | | 6-Lane | | No Build | | 6-Lane | | 1 Hr. | 8 Hr. |
| | 1 Hr. | 8 Hr. | 1 Hr. | 8 Hr. | 1 Hr. | 8 Hr. | 1 Hr. | 8 Hr. | | |
| 1 | - | - | - | - | - | - | - | - | -- | - |
| 2 | 8.0 | 4.6 | 8.5 | 4.7 | 7.3 | 4.3 | 9.0 | 4.7 | 35.0 | 9.0 |
| 3 | 8.4 | 4.8 | 8.5 | 4.8 | 8.5 | 5.0 | 9.0 | 4.7 | 35.0 | 9.0 |
| 4 | 8.0 | 4.6 | 8.1 | 4.5 | 7.8 | 4.4 | 8.0 | 4.3 | 35.0 | 9.0 |
| 5 | 8.1 | 4.6 | 5.1 | 4.6 | 8.1 | 4.3 | 8.2 | 4.5 | 35.0 | 9.0 |
| 6 | 8.0 | 4.6 | 8.3 | 4.1 | 7.9 | 4.4 | 8.3 | 4.4 | 35.0 | 9.0 |
| 7 | 10.8 | 4.5 | 8.2 | 4.6 | 7.7 | 4.3 | 8.1 | 4.3 | 35.0 | 9.0 |
| 8 | 8.1 | 4.6 | 8.2 | 4.6 | 8.0 | 4.4 | 8.3 | 4.4 | 35.0 | 9.0 |
| 9 | 7.8 | 4.4 | 7.9 | 5.4 | 7.2 | 4.0 | 7.4 | 4.0 | 35.0 | 9.0 |
| 10 | 7.9 | 4.5 | 9.9 | 5.3 | 7.6 | 4.1 | 11.8 | 5.7 | 35.0 | 9.0 |
| 11 | 7.8 | 4.4 | 9.8 | 4.9 | 7.4 | 4.1 | 10.3 | 5.3 | 35.0 | 9.0 |
| 12 | 7.1 | 4.0 | 8.1 | 4.5 | 7.4 | 4.0 | 8.0 | 4.3 | 35.0 | 9.0 |
| 13 | 8.2 | 4.6 | 8.1 | 4.5 | 7.1 | 4.1 | 8.0 | 4.3 | 35.0 | 9.0 |
| 14 | 7.8 | 4.4 | 7.9 | 4.4 | 7.3 | 4.0 | 7.3 | 4.0 | 35.0 | 9.0 |
| 15 | 8.4 | 4.8 | 8.6 | 4.7 | 8.4 | 4.7 | 8.8 | 4.6 | 35.0 | 9.0 |
| 16 | 8.9 | 5.1 | 10.7 | 5.6 | 12.6 | 6.8 | 12.8 | 6.2 | 35.0 | 9.0 |
| 17 | 8.8 | 5.1 | 9.7 | 5.2 | 9.8 | 5.1 | 10.3 | 5.7 | 35.0 | 9.0 |
| 18 | 8.3 | 4.8 | 9.1 | 4.9 | 11.3 | 5.8 | 9.6 | 4.9 | 35.0 | 9.0 |
| 19 | 8.8 | 4.9 | 8.7 | 4.7 | 11.6 | 6.0 | 8.6 | 4.4 | 35.0 | 9.0 |
| 20 | 8.6 | 4.9 | 8.9 | 4.9 | 10.7 | 5.7 | 8.8 | 4.5 | 35.0 | 9.0 |
| 21 | 10.5 | 5.8 | 9.5 | 5.1 | 13.8 | 6.6 | 14.7 | 6.3 | 35.0 | 9.0 |
| 22 | 9.7 | 5.3 | 8.9 | 4.8 | 11.8 | 6.3 | 12.9 | 5.7 | 35.0 | 9.0 |

*Including background concentrations:

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TABLE IV-8

U.S. ROUTE 1
 Kingsville Option 'F'
 CO CONCENTRATIONS * AT EACH SITE, IN PPM

| Receptor # | 1995 | | | | 2015 | | | | NAAQS | |
|------------|----------|-------|--------|-------|----------|-------|--------|-------|-------|-------|
| | No Build | | 6-Lane | | No Build | | 6-Lane | | 1 Hr. | 8 Hr. |
| | 1 Hr. | 8 Hr. | 1 Hr. | 8 Hr. | 1 Hr. | 8 Hr. | 1 Hr. | 8 Hr. | | |
| 6 | 8.0 | 4.6 | 8.2 | 4.6 | 7.9 | 4.4 | 8.1 | 4.3 | 35.0 | 9.0 |
| 7 | 10.0 | 4.5 | 8.8 | 4.9 | 7.7 | 4.3 | 7.9 | 4.2 | 35.0 | 9.0 |
| 8 | 8.1 | 4.6 | 8.3 | 4.6 | 8.0 | 4.4 | 8.4 | 4.5 | 35.0 | 9.0 |
| 9 | 7.8 | 4.4 | 7.9 | 4.4 | 7.2 | 4.0 | 7.5 | 4.0 | 35.0 | 9.0 |

*Including background concentrations:

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3. Objectives and Type of Analysis

This air technical analysis was conducted in accordance with the Maryland State Highway Administration guidelines to determine Carbon Monoxide (CO) impacts from study alternates in this project corridor. Impact analysis was performed by comparing the resulting CO concentrations (parts per million/ppm) from each alternate to the National Ambient Air Quality Standards (NAAQS) and the State Ambient Air Quality Standards. The State and Federal standards are shown below.

**Maximum One-Hour
Concentration**

**Maximum Eight-
Hour Average**

35 ppm

9 ppm

Microscale analysis was performed to determine CO concentrations. The CO levels were generated by Version 4 of the California Line Dispersion Model (CALINE4). This model generated both one and eight-hour levels at all the sensitive receptors for both the No Build and Build Alternates for the design year (2015) and the estimated construction completion date (1995).

CO concentrations are strongly influenced by local meteorological conditions. Elements such as wind speed, wind direction and atmospheric stability directly influence dispersion and mixing of the pollutant. Shown below are the meteorological conditions analyzed in the CALINE4 analysis.

- Aerodynamic Roughness Coefficient - 100 cm
- Molecular Weight - 28
- Settling Velocity - 0
- Deposition Velocity - 0

- Wind Direction Bearing - worst case wind angle
- Wind Speed - 1 hour - 1m/sec
8 hour - 2m/sec before 5 p.m. and
1m/sec after 5 p.m.
- Atmospheric Stability Class - 'D' before 5 p.m. and
'F' after 5 p.m.
- Mixing Height - 350 m
- Temperature (cel.) - 6.7° C
- Mixing Zone Width - 6-Lane with median - 96'
6-Lane with Jersey Barrier - 78'
No Build - 40'

4. Conclusions

No violations of the NAAQS were identified in either analysis year for any of the alternates. This was true for both one-hour and eight-hour concentrations.

5. Conformity With Regional Air Quality Planning

The project is in an air quality nonattainment area which has transportation control measures in the State Implementation Plan (S.I.P.). This project conforms with the S.I.P. since it originates from a conforming transportation improvement program (See Coordination Letter dated July 13, 1988 from the Department of the Environment in Section VII.A).

6. 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, materials handling, and through the possible burning of land clearing debris. The State Highway Administration has addressed this possibility by establishing Standard

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Specifications for Construction and Materials which specifies procedures to be followed by contractors involved in highway construction in Maryland.

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

Each of the aforementioned elements of project consistency with the State Implementation Plan have been evaluated as noted and through this evaluation the determination has been made that this project is consistent with the State Implementation Plan for Air Quality.

7. Agency Coordination

Copies of the Air Quality Technical Report prepared for this project were sent to the following agencies for review:

- Maryland Air Management Administration.
- U.S. Environmental Protection Agency.

Responses from these agencies are included in Section VII.A.

E. NOISE LEVELS

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1. Prediction Methodology

a. STAMINA 2.0/OPTIMA Noise Prediction Model

Both predicted Build and No Build scenarios were modeled to assess future noise impacts. All noise prediction was performed with the STAMINA 2.0/OPTIMA Noise Barrier Cost Reduction computer models. This model is the computer version of the FHWA Highway Traffic Noise Prediction Model (Rep. No. FHWA-RD-77-108). Variables in the model include:

- Hourly traffic volume by vehicle type (cars, heavy trucks and medium trucks)
- Vehicle speeds
- Horizontal and vertical geometry
- Penalty factor for crest grades greater than 3%
- Propagation decay factors
- Attenuation from shielding elements (buildings, thick vegetation)

2. Summary of Traffic Parameters

Level of Service 'C' (LOS 'C') Traffic Volumes were analyzed for both the Six-Lane and No Build Alternates. The LOS 'C' volume represents a traffic condition based on roadway geometrics where the maximum amount of vehicles can move freely at the posted speed limit. As the number of vehicles increases above LOS 'C', vehicle speeds decrease, thus decreasing noise levels. Therefore, even though peak hour volumes are greater in most cases than the LOS 'C' volumes, their associated noise levels may not be as loud due to of a resulting decrease in operating speed and stop-and-go traffic movements.

The LOS 'C' volumes used in the prediction analysis are shown in Table IV-9. Truck percentages are shown on Table IV-10.

3. Impact Assessment

a. General

The determination of environmental noise impact 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 (Table III-3) published in 23 CFR 772.

The factors which will be evaluated when determining whether mitigation will be considered and whether the mitigation will be considered reasonable and feasible will be:

- Whether Federal Highway Administration Noise Abatement Criteria (FHWA NAC) are approached or exceeded - 67 dBA for residential areas;
- Whether a substantial (10 dBA or more) increase over Ambient Level would occur;
- Whether a substantial noise increase would result from the highway project - minimum of 5 dBA increase of Build over No Build levels in the design year of the project;

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TABLE IV-9

LOS 'C' TRAFFIC VOLUMES FOR
NO BUILD AND BUILD ALTERNATE

NO BUILD ALTERNATE

Total
Vehicles
1356

6-LANE ALTERNATE

| <u>Station Limits</u> | <u>Total Vehicles</u> |
|-----------------------|-----------------------|
| 130+00 - 280+00 | 2,593 |
| 340+00 - 495+00 | |
| 540+00 - END | |
| 280+00 - 339+00 | 2,674 |
| 496+00 - 539+00 | |

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TABLE IV-10
U.S. ROUTE 1
TRUCK PERCENTAGES

| | <u>Light</u> | <u>Medium</u> | <u>Heavy</u> | <u>Total</u> |
|-----------------------------|--------------|---------------|--------------|--------------|
| Average Daily Traffic (ADT) | | | | |
| Gasoline Powered | 0.86 | 0.72 | 0.06 | 1.64 |
| Diesel Powered | <u>0.86</u> | <u>0.72</u> | <u>1.13</u> | <u>2.71</u> |
| Total | 1.72 | 1.44 | 1.19 | 4.35 |
| Design Hour Volume (DHV) | | | | |
| Gasoline Powered | 0.62 | 0.74 | 0.02 | 1.38 |
| Diesel Powered | <u>0.62</u> | <u>0.74</u> | <u>0.39</u> | <u>1.75</u> |
| Total | 1.24 | 1.48 | 0.41 | 3.13 |

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- Whether a feasible method is available to reduce the noise;
- Whether the noise mitigation is cost effective for those receptors that are impacted - approximately \$40,000 per residence;
- Whether the mitigation is acceptable to affected property owners; and
- Whether the majority of the impacted residences were constructed before or after the opening of the highway.

b. Impact Analysis and Feasibility of Noise Abatement

Table IV-11 summarizes the Build and No Build noise levels derived from the computer modelling for each Noise Sensitive Area (NSA). The barrier cost analysis shown on the table is based upon a unit cost of the barrier of \$27 per square foot.

This figure represents the cost of walls based on the average cost of several statewide noise barrier projects and includes design, drainage, landscaping, construction, etc. The maximum cost effective price for a noise wall is approximately \$40,000 per home.

NSA 1

NSA 1 is a single family residence that was originally included in the noise analysis as a sensitive receiver. This property, however, was acquired by SHA for future improvements to Maryland Route 152. No further analysis was conducted for this NSA.

TABLE IV-11

Noise Abatement Analysis Summary

| Noise Sensitive Area | Number of Impacted Residences ¹ | Project Noise Levels, Leq | | | | Barriers | | | |
|----------------------|--|---------------------------|-----------------|------------------------------|--------------------|-------------|---------------------|-----------------|--------------------|
| | | Ambient | No Build (2015) | Build (2015) | Build with Barrier | Length (Ft) | Average Height (Ft) | Total Cost (\$) | Cost Per Residence |
| 1 | | | | Dropped From Study | | | | | |
| 2 | 4 ³ | 68 | 68 | Displaced By Build Alternate | | | | | |
| 3 | 45 ³ | 71 | 69 | 70 | 64 | 230 | 18 | 2,750,760 | 61,128 |
| 4 | 1 | 66 | 66 | 67 | 61 | 315 | 18 | 153,090 | 153,090 |
| 5 | 0 | 65 | 65 | 66 | -- | -- | -- | --- | --- |
| 6 | 0 | 61 | 62 | 64/62 ² | -- | -- | -- | --- | --- |
| 7 | 0 | 62 | 61 | 64/63 ² | -- | -- | -- | --- | --- |
| 8 | 1 | 64 | 66 | 68/69 ² | 63/64 ² | 340 | 18 | 165,240 | 165,240 |
| 9 | 0 | 53 | 53 | 56 | -- | -- | -- | --- | --- |
| 10 | 0 | 62 | 62 | 66 | -- | -- | -- | --- | --- |
| 11 | 0 | 61 | 59 | 62 | -- | -- | -- | --- | --- |
| 12 | 0 | 62 | 60 | 64 | -- | -- | -- | --- | --- |
| 13 | 4 | 70 | 68 | 70 | 62 | 660 | 14 | 249,480 | 62,370 |
| 14 | 0 ³ | 58 | 58 | 60 | -- | -- | -- | --- | --- |
| 15 | 52 ³ | 63 | 67 | 68 | 61 | 6500 | 19 | 3,334,500 | 64,125 |
| 16 | 0 | 62 | 61 | 62 | -- | -- | -- | --- | --- |
| 17 | 0 ⁴ | 65 | 64 | 66 | -- | -- | -- | --- | --- |
| 18 | 6 ⁴ | 62 | 65 | 67 | 60 | 420 | 18 | 204,120 | 34,020 |
| 19 | 0 | 65 | 62 | 64 | -- | -- | -- | --- | --- |
| 20 | 0 | 61 | 58 | 59 | -- | -- | -- | --- | --- |
| 21 | 0 | 66 | 65 | 65 | -- | -- | -- | --- | --- |
| 22 | 0 | 57 | 64 | 64 | -- | -- | -- | --- | --- |

¹ Equals the numbers of homes with projected levels of 67 dBA or greater and receiving a 5 dBA reduction from abatement measure

² Kingsville Options B and E Modified/Kingsville Option F

³ Number of homes based on 1 per 125 of park property

⁴ Number of homes based on church equal to five residences

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NSA 2

NSA 2 represents four (4) residences on the west side of U.S. Route 1, just north of Reckord Road (See Figure II-15). All four (4) of these residences would be displaced by the Six-Lane Alternate. No further analysis was conducted for NSA 2.

NSA 3

NSA 3 is a residence on the east side of the Gunpowder Falls State Park property (See Figure II-14). The 2015 No Build noise level is predicted to be 69 dBA and the Build level is 70 dBA. The FHWA NAC is exceeded by the No Build and Build alternates; however, the increase of build over ambient is -1 dBA (due to the shift of the roadway) and the increase of Build over No Build is only 1 dBA.

NSA 3 is offset 100 feet right from the centerline of the proposed improvements. In order to achieve at least a constant 5 decibel reduction at this offset, it would require a noise barrier averaging 18 feet in height. The length of the wall would be 2,780 feet. The total cost of this wall would be \$1,351,080.

The cost per residence for this wall is calculated by dividing the total cost of the wall by the equivalent of 125 feet of parkland equaling 1 residence. In this case, the west side wall protects an equivalent of 22 residences. The cost per residence therefore is \$48,253.

The wall length necessary to protect the west side of the park is 2,880 feet. An eighteen foot wall at

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this location costs \$1,399,680. The equivalent cost per residence (assuming 23 "residences" protected) would be \$60,856.

In summary, the total cost of the Little Gunpowder Falls noise barrier system would be \$2,750,760. This system would reduce noise levels an average of 5 decibels at an offset of 100 feet from the proposed U.S. Route 1 improvements centerline, protecting an equivalent of 45 residences. The cost per residence figure for this system is \$61,128.

Associated with constructing this wall would be the following problems:

- Emergency park access
- Equestrian access across U.S. Route 1
- Construction of noise barriers on the Little Gunpowder Bridge
- Exceedance of SHA cost per residence criteria

The construction of noise barriers would deny both emergency access to the park and equestrian crossings across U.S. Route 1. Breaks in the wall for access would decrease the acoustic effectiveness. It would also impact wall aesthetics. Access doors are standard on current interstate projects but none are the size to accommodate emergency 4-wheel vehicles and horses with mounts.

Construction of noise walls thru the park would also require that walls be built on the new Little Gunpowder Bridge. For constructability, these walls would be steel. This proposes an aesthetic problem. The inconsistency between concrete and steel finishes

would detract from the natural aesthetics of the park.

Another problem with the system is that it exceeds the SHA cost per residence criteria of \$40,000 per residence. An alternative to concrete barriers to reduce costs are earth berms. An earth berm through the park, on both sides, would cost approximately \$1,659,000. The cost per "residence" would be \$36,900. An 18 foot high berm with an eight foot cap, however, would require a minimum base of 80 feet. The berm would require an additional 10 acres of park right-of-way. This alternative therefore would not be acceptable.

For the reasons cited above, a noise barrier system at the Little Gunpowder Park would be neither feasible nor cost effective.

NSA 4

NSA 4 represents one (1) single family residence located on the east side of U.S. Route 1, just south of Reckord Road (See Figure II-15). This NSA is expected to receive noise levels at 67 dBA under the Build Alternate. The increase of Build over ambient and the increase of Build over No Build is 1 dBA. A noise barrier measuring 315 feet in length by 18 feet in height could be constructed to reduce noise levels at this NSA by 5 dBA; however, this barrier would cost \$153,090. Since only one residence would be protected the cost per residence would be \$153,090. This NSA would also be affected by driveway access and acoustic segmentation problems. For these reasons, a noise barrier at NSA 4 would not be feasible or reasonable.

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NSA 5

NSA 5 represents a day care center and five (5) residences on the east side of U.S. Route 1, near New Cut Road (See Figure II-14). The FHWA NAC would not be equalled or exceeded at NSA 5. The increase of Build over ambient and the increase of Build over No Build would be 1 dBA. Since none of the mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 5.

NSA 6

NSA 6 represents four (4) residences located on the east side of U.S. Route 1, just north of Bradshaw Road (See Figures II-11, 14 and 15). The FHWA NAC would not be equalled or exceeded at NSA 6. The increase of Build over ambient is 3 dBA under Kingsville Options B and E Modified and 1 dBA under Kingsville Option F. The increase of Build over No Build is 2 dBA under Kingsville Options B and E Modified and 0 dBA under Kingsville Option F. Since none of the mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 6.

NSA 7

NSA 7 represents the historic St. John's Church (H-13) in Kingsville (See Figures II-13, 16 and 17). The FHWA NAC is not equalled or exceeded. The increase of Build over ambient at NSA 7 would be 2 dBA under Kingsville Options B and E Modified and 1 dBA under Kingsville Option F. The increase of Build over No Build would be 3 dBA under Kingsville Options B and E Modified and 2 dBA under Kingsville Option F.

Since none of the mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 7.

NSA 8

NSA 8 represents the historic Lassahn Funeral Home (H-10) in Kingsville (See Figures II-13, 16 and 17). The FHWA NAC would be exceeded at this site (68 dBA under Kingsville Option B and E Modified and 69 dBA under Kingsville Option F). The increase of Build over ambient, would be only 4 dBA under Kingsville Options B and E Modified and 5 dBA under Kingsville Option F. The increase of Build over No Build would be 2 dBA under Kingsville Options B and E Modified and 3 dBA under Kingsville Option F. A noise barrier could be constructed to reduce the Build noise levels by 5 dBA. This barrier would need to be 340 feet long and 18 feet high. The cost of such a barrier would be approximately \$165,240. Since only one receptor is protected, the cost per residence would be \$165,240. This NSA would also involve potential access and acoustic problems due to the driveway connection. NSA 8 does not meet most of the requirements for consideration of mitigation, and noise abatement barriers would not be cost-effective. For these reasons, noise barriers would not be feasible or reasonable at this NSA.

NSA 9

NSA 9 represents a single family residence located on Bradshaw Road, just east of Jerusalem Road (See Figures II-13, 16 and 17). The FHWA NAC would not be equalled or exceeded under either the Build or No Build alternates. The increase of Build levels over

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ambient and No Build would both be 3 dBA. Since none of the mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 9.

NSA 10

NSA 10 represents a group of five (5) residences located on the east side of U.S. Route 1, near Cheryl Avenue (See Figure II-12). The FHWA NAC for the Six-Lane Alternate would not be equalled or exceeded at this NSA. The increase of Build over ambient and No Build would both be 4 dBA. Since none of the mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 10.

NSA 11

NSA 11 represents an historic residence (H-8) located on the east side of U.S. Route 1, north of Mt. Vista Road (See Figure II-12). The FHWA NAC for the Build alternate would not be equalled or exceeded. The increase of Build over ambient would be 1 dBA and the increase of Build over No Build would be 3 dBA. Since none of the noise mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 11.

NSA 12

NSA 12 represents 9 residences along Sheradale Drive (See Figure II-12). The FHWA NAC for the Build alternate would not be equalled or exceeded. The increase of Build levels over ambient would be 2 dBA and the increase of the Build alternate over No Build would be 4 dBA. Since none of the noise mitigation

requirements have been met, consideration of noise abatement is not warranted at NSA 12.

NSA 13

NSA 13 represents four (4) single family residences on the west side of U.S. Route 1, south of Mt. Vista Road (See Figure II-12). The FHWA NAC are exceeded under either the Build and No Build alternates. The increase of Build noise levels over ambient is 0 dBA and the increase of Build over No Build is 2 dBA. A noise barrier measuring 660 feet in length and 14 feet high would provide an 8 dBA noise reduction. This wall would cost \$249,480. The cost per residence would be \$62,370. Noise abatement at this NSA would, however, also involve the access and acoustic problems associated with the residential driveways. For these reasons, noise barriers would not be feasible or reasonable at NSA 13.

NSA 14

NSA 14 represents the historic residence (H-6) on the west side of U.S. Route 1 at Mt. Vista Road (See Figure II-12). The FHWA NAC are not equalled or exceeded under any of the alternates. The Build noise levels are predicted to exceed both the ambient and No Build levels by 2 dBA. Since none of the noise mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 14.

NSA 15

NSA 15 represents the Big Gunpowder portion of Gunpowder Falls State Park (See Figure II-11). The

FHWA NAC are exceeded at this site for both the Build and No Build alternates. The Build noise levels are expected to exceed ambient levels by 5 dBA and the No Build levels by only 1 dBA.

In order to provide noise abatement for the west side of Gunpowder State Park, a noise barrier system consisting of three (3) walls would be required. The barrier along the west side of U.S. Route 1 would extend from the Gunpowder Falls to south of Sheradale (approximately 3000 feet). This barrier would average 18 to 20 feet in height. The cost of this segment would be \$1,539,000. The "cost per residence" would be \$64,125 (based on 1 residence per 125 feet of park property).

Two barriers would be needed to protect the park on the east side of U.S. Route 1. The two barrier segments would extend from Miller Road to Gunpowder Falls and from Gunpowder Falls to South of Sheradale Drive. The average height of these walls would be 18 to 20 feet and are 1500 and 2000 feet in length respectively.

The barrier between Miller Road and Gunpowder Falls would cost \$769,500. The cost per residence here would also be \$64,125. The barrier between Gunpowder Falls and Sheradale Drive would cost \$1,026,000. The "cost per residence" again would be \$64,125. The total cost of the system would be \$1,795,500. The average cost per residence would therefore be \$64,125. This figure exceeds the SHA cost per residence criteria of \$40,000.

The total "cost per residence" for the sound wall system would be \$64,125. An alternative to concrete

barriers to reduce costs are earth berms. An earth berm large enough to provide the same acoustic benefit as the wall would cost approximately \$1,800,000. The "cost per residence" for the berm would be \$34,600. An 18 foot high berm with an eight foot cap, however, would require a minimum base of 80 feet. This would require an additional 12 acres of right-of-way from the Park. This alternative therefore would not be acceptable.

The construction of this system would also impact emergency access to the park. Breaks in the wall to accommodate emergency access would decrease its' acoustic effectiveness. It would also impact wall aesthetics. Doors are standard on current interstate barrier projects however none have been the size necessary to accommodate 4-wheel emergency vehicles.

Another consideration is that although noise levels do exceed FHWA NAC, the impact is existing. The proposed improvements to U.S. Route 1 will only increase one to two decibels. This increase would not be discernible. Based on this, it would seem infeasible to construct abatement structures. For this reason and the others cited previously, noise barriers are not recommended at this NSA.

NSA 16

NSA 16 represents Perry Hall Methodist Church. The FHWA NAC will not be equalled or exceeded at this site under either alternate. The Build noise levels are expected to equal the ambient level and exceed the No Build level by 1 dBA. Since none of the noise mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 16.

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NSA 17

NSA 17 represents the Perry Hall branch of the Baltimore County Library, which is located on the west side of U.S. Route 1 just south of Walter Avenue (See Figure II-10). The FHWA NAC would not be equalled or exceeded at this site under either alternate. The Build noise levels are expected to exceed ambient by 1 dBA and No Build by 2 dBA. Since none of the noise mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 17.

NSA 18

NSA 18 represents St. Michael's Lutheran Church, which is located on the west side of U.S. Route 1, south of Baker Lane (See Figure II-10). The FHWA NAC would be equalled under the Build Alternate. The expected increase of Build levels over ambient levels is 5 dBA and 2 dBA over No Build. Exterior uses at this NSA are not, however, extensive, and the church is air conditioned.

A potential noise barrier would have to be 420 feet long and 18 feet high. The cost of the barrier would be \$204,120. The church (which counts as five (5) residences) and one (1) residence would receive at least 5 dBA noise reduction from such a wall. The cost per residence would be \$34,020, which is below the \$40,000 guideline. The properties protected by the barrier, however, have driveway access to U.S. Route 1 at two (2) locations. The segmenting created by these driveways would significantly decrease the acoustic effectiveness.

Since the exterior activities at NSA 18 are generally not adversely impacted by highway noise and that the effectiveness of the barrier would be questionable, further consideration of noise abatement is not warranted.

NSA 19

NSA 19 represents nine (9) single-family residences on the east side of U.S. Route 1, between Joppa 'T' and Soth Avenue (See Figure II-9). The FHWA NAC would not be exceeded at NSA 19 under either alternate. The Build levels are not expected to exceed either the ambient or No Build levels. Since none of the noise mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 19.

NSA 20

NSA 20 represents Perry Hall Elementary School, which is located on the east side of U.S. Route 1, north of Ebenezer Road (See Figure II-9). The FHWA NAC would not be exceeded at NSA 20 under either alternate. The Build levels are not expected to exceed either the ambient or No Build levels. Since none of the noise mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 20.

NSA 21

NSA 21 represents Perry Hall Presbyterian Church, which is located on the west side of U.S. Route 1, south of Joppa Road (See Figure II-9). The FHWA NAC would not be exceeded at NSA 21 under either

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alternate. The Build levels are not expected to exceed either the ambient or No Build levels. Since none of the noise mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 21.

NSA 22

NSA 22 represents five (5) residences on the east side of U.S. Route 1, north of Silver Spring Road (See Figure II-9). The FHWA NAC would not be equalled or exceeded at NSA 22 under either alternate. The Build Alternate would exceed ambient by 7 dBA; however, the Build and No Build levels would be equal. Since none of the noise mitigation requirements have been met, consideration of noise abatement is not warranted at NSA 22.

c. **Other Mitigation Measures**

In addition to noise walls, other abatement measures were considered. These measures included: traffic management measures, alterations of horizontal and vertical alignment, acquisition of real property (or property rights to establish buffer zones) and earth berms.

Traffic management measures which could potentially be used include traffic control devices, signing for prohibition of certain vehicles (heavy trucks), time use restrictions for certain types of vehicles and modified speed limits. Traffic devices already exist at warranted locations in the corridor. Additional signals will be added on an as-needed basis. Prohibitions and/or restrictions for heavy trucks would not be effective since heavy trucks account for

only 1% of the traffic. The speed limit has already been modified downward (due to design speed).

Alteration of the horizontal and vertical alignment of U.S. Route 1 would not be feasible (to the extent required to affect noise levels) due to the numerous at-grade roadway and driveway connections in the corridor. Acquisition of real property or buffer zones would not be feasible due to the existing residential development immediately adjacent to U.S. Route 1.

Earth berms are, in general, less expensive to construct than noise walls; however, the amount of horizontal space required to achieve the necessary height is not available for most of the Noise Sensitive Areas (due to residential development). Sufficient horizontal space would be available within the two Park areas; however, a substantial amount of right-of-way would be required.

d. **Summary**

In general, the proposed widening of U.S. Route 1 would not substantially increase noise levels over either ambient conditions or No Build. At six (6) NSA's, however, the FHWA NAC will be equalled or exceeded. Noise abatement has been demonstrated not to be reasonable or feasible at five (5) of the six (6) NSA's. The sixth NSA (NSA 18) will be studied for possible noise abatement during final design.

e. **Construction Impacts**

A noise impact quite often unaddressed in noise studies is that created from construction activities. These impacts are created from such equipment as:

- Vibratory Rollers
- Front Loaders
- Backhoes
- Tractors
- Scrapers & Graders
- Pavers
- Trucks
- Jackhammers
- Compressors

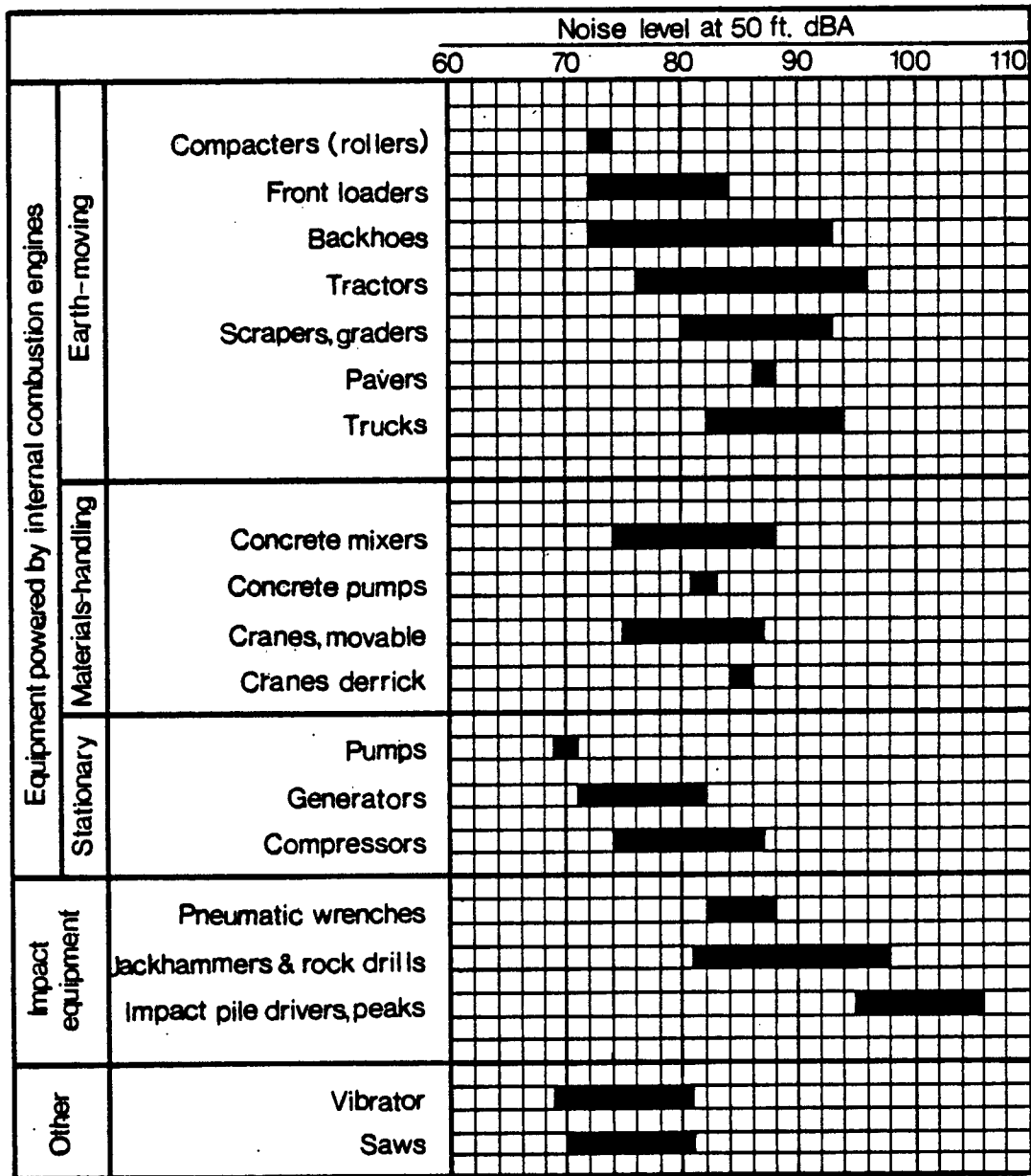
Noise level ranges of the above listed construction equipment along with other equipment are shown on Figure IV-1.

Mitigation of construction noise impacts can be addressed in the following areas:

- Equipment Noise Control
- Site Control
- Community Relations
- Incentives

1) Equipment Noise Control - The below strategies can be applied to mitigate noise impacts created by construction equipment.

- Mufflers
- Derating Engines
- Sealing and Lubricating Tracks
- Engine Vibration Isolation
- Turbocharging
- Maintenance



Note: Based on limited available data samples

Source: Environmental Impact Assessment, L.W. Canter, 1977

U.S. ROUTE 1

Silver Spring Rd. To Maryland Route 152

Figure IV-1
Construction Equipment Noise Range

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e. Coordination With Local Officials

In order to assist local governments in planning development near this project, the results of the noise analysis will be made available to the local planning jurisdictions affected by this project.

F. IMPACT ON HISTORIC AND ARCHAEOLOGIC SITES

Historic Sites

H-4 Baltimore Embroidery Company (BA 907)

The Embroidery Company is located on the east side of U.S. Route 1 just north of Baker Lane/Chapel Road. The existing pavement is approximately 40 feet wide and is approximately 20 feet from the face of the building. As shown on Figure II-10, U.S. Route 1 would be widened to 96 feet, retaining the existing east edge of pavement. A slight adjustment to the grade of the roadway will necessitate reconstruction of the existing curb and sidewalk in front of the historic site; however, all construction will occur within the existing right-of-way. Since the widening will occur on the opposite side of U.S. Route 1, there will be no significant changes in noise levels or air quality. Changes to the visual environment surrounding the sight will be minimal.

The State Historic Preservation Officer has determined that the project would have no adverse effect on the Embroidery Company. The criteria of adverse effect were found inapplicable because of the integrity of the site, and the location, design, material, and workmanship would not be significantly diminished. The site will not be damaged, destroyed, or altered. There will be no right-of-way required from the site nor will the site be isolated from the

portion of its setting associated with its historicity. The SHPO's September 13, 1988 letter is included in the Comments and Coordination Section (p. VII.A-21). The Advisory Council on Historic Preservation has concurred with this determination (see letter on P. VII.A-5).

H-6 Heathcote (BA 238)

Heathcote is located in the southwest quadrant of the U.S. 1/Mt. Vista Road intersection and the existing pavement of U.S. Route 1 is currently 230 feet from the historic boundary and 325 feet from the dwelling. As shown on Figure II-12, U.S. Route 1 would be widened to 96 feet in the vicinity of Heathcote. The widening would occur on both sides of the existing roadway. The new U.S. Route 1 roadway would come within 205 feet of the historic boundary and 300 feet of the dwelling. Mt. Vista Road would be improved to accommodate turning lanes; however, no construction would occur in or near the historic boundaries.

Heathcote would not be affected because the undertaking will not alter the characteristics of the property which qualify it for the National Register. There will be no alteration of the site's location, setting, or use. There will be no acoustic or visual impacts to the site. The State Historic Preservation Officer has stated that the site would not be affected in his September 13, 1988 letter (p. VII.A-21).

H-8 Gorsuch-Wilson House (BA 2303)

The Gorsuch-Wilson House is located on the east side of U.S. Route 1, just north of Mt. Vista Road. The extant dwelling is approximately 185 feet from the edge of existing paving. As shown on Figure II-12, all widening would occur on the west side of U.S. Route 1, holding the existing east edge of pavement. No construction would occur outside the existing

right-of-way line, thus there would be no encroachment upon the historic site boundary.

The site would not be affected because the undertaking will not alter the characteristics of the property which qualify it for the National Register. There will be no alteration of the site's location setting, or use.

H-10 Days-Dean-King House (BA 243)

As shown on Figures II-13, II-16, and II-17, this site (currently the Lassahn Funeral Home) is located in Kingsville, on the west side of U.S. Route 1, just south of Sunshine Avenue/Bradshaw Road. The historic boundary is coterminus with the existing right-of-way line of U.S. Route 1. As shown on these Figures, U.S. Route 1 would be widened from 40 feet to 96 feet. All widening would occur on the east side of U.S. Route 1, holding the west edge of paving, regardless of which Kingsville option is selected. Several options were developed and studied for the U.S. 1/Sunshine Avenue/Bradshaw Road intersection. Three (3) options for the Kingsville area studied in Stage II - Option B, E Modified, and F. A retaining wall, with an average height of four feet, is proposed for all three options. This wall will retain earth from the historic property and will eliminate the need to acquire slope easement from this site. The retaining wall will also prevent increased vibrations from traffic, which was a concern raised by the State Historic Preservation Officer. The existing driveway would be adjusted to match the proposed grade; however, its location would not be changed. Noise levels will increase to a level above the FHWA NAC (68 dB for Options B and E Modified, 69 dB for Option F); however, no significant impacts will occur because the increase over No Build is less than 5 dBA. There will be no significant change to the visual environment. There will be virtually no difference in air quality (0.1 to

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0.4 ppm increase of C.O.). The State Historic Preservation Officer has stated that the site would not be affected under Options B and E Modified, and that it would not be adversely affected under Option F (see letter on p.VII.A-21). The Advisory Council on Historic Preservation has concurred with this determination (see letter on p. VII.A-5).

The site would not be affected by either alternate as the building would be further away from the road than it was earlier in the century. In his September 13, 1988, letter the SHPO stated that the site would not be affected because the undertaking will not alter the characteristics of the property which qualify it for the National Register. There will be no alteration of the site's location, setting, or use.

All three Kingsville Options are also being considered under the Six-Lane Alternate. All three options eliminate the skewed intersection at U.S. 1/Bradshaw Road/Sunshine Avenue, and improve the vertical sight distance on U.S. Route 1. Option B realigns Bradshaw Road through the Signet Bank, Kingsville Pharmacy, and King's Gas Station to Belair Road. Sunshine Avenue would be aligned directly across from Belair Road and swing behind the Kingsville Post Office before tying into the existing roadway (See Figure II-16).

Option E modified shows Bradshaw Road realigned between the Key Motors Auto Dealer and the Bank and through the Kingsville Pharmacy and Gas station properties to Belair Road. The Sunshine Avenue connection would be similar to Option B (See Figure II-17).

Option F would provide a one way pair system to reduce impacts to the center of Kingsville. Northbound traffic would use existing Belair Road. The southbound roadway would bypass the center of Kingsville by swinging to the west just

north of the Lassahn Funeral Home and tying back onto existing alignment north of the Kings Court Motel. The realignment of Bradshaw Road would be identical to that in Option E modified. The connection to Sunshine Avenue would be made approximately 2100 feet to the north of the Bradshaw Road/U.S. 1 intersection (See Figure II-13).

The only Kingsville option which would be in the vicinity of the Funeral Home is Option F. This option provides a one-way pair roadway system through Kingsville and would require some slope easement in the northeast corner of the property. No construction, however, would occur within the historic boundaries. The State Historic Preservation Officer, in his September 13, 1988 letter, states the site would not be affected by options B or E because the undertaking will not alter the characteristics of the property which qualify it for the National Register. There will be no alteration of the site's location, setting, or use. He has also stated that Option F would have no adverse effect on the site. The criteria of adverse effect were found inapplicable because of the integrity of the site, and the location, design, material, and workmanship would not be significantly diminished. The site will not be damaged, destroyed, or altered. There will be no right-of-way required from the site nor will the site be isolated from the portion of its setting associated with its historicity.

H-13 St. John's Church (BA 132)

St. John's Church is located on the east side of U.S. Route 1, just north of the Bradshaw Road/Sunshine Avenue/U.S. 1 intersection. The historic boundary for this site is coterminus with the existing U.S. Route 1 and Jerusalem Road right-of-way lines. The closest extant structure on the site to U.S. Route 1 is approximately 60 feet from the existing pavement.

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Under all proposed options (Kingsville Options B, E and F), the effects to this site are essentially the same. (The Six-Lane Alternate with Kingsville Option F is shown on Figure II-13; Option B on Figure II-16 and Option E Modified on Figure II-17.

All widening would occur on the west side of U.S. Route 1, holding the existing east edge of pavement. In addition, the section of Bradshaw Road between Jerusalem Road and U.S. Route 1 would be closed under all alternates. The pavement will be removed, and the area landscaped. Bradshaw Road and Sunshine Avenue will be re-aligned under the Six-Lane Alternates with Option B. No construction is proposed within the historic boundary. Noise levels will increase approximately 3 dB over No Build; however, the FHWA NAC will not be equaled or exceeded. C.O. levels would increase a maximum of 2.6 ppm over No Build, but would remain significantly below the N.A.A.Q.S. The visual environment would not change significantly.

Option E Modified, shown on Figure II-17, will relocate Bradshaw Road only in the area between Jerusalem and Belair Roads. The section of Bradshaw Road adjacent to the historic site boundary will be removed. The land will be rehabilitated and planted. The air, noise and visual impacts would be the same as Option B.

Kingsville Option F differs from Options B and E in that it provides a one-way pair roadway system through Kingsville. U.S. Route 1 (Belair Road) would not be widened on the west side as called for in the other options. Bradshaw Road would be relocated, and a short stretch, as in the others, removed, with the area rehabilitated and planted. Bradshaw Road would be extended to connect with the new southbound U.S. Route 1. More of Sunshine Avenue would be removed than is called for with Option B and E. Noise levels will increase

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approximately 2 dB over No Build, however, the FHWA NAC would not be equaled or exceeded. C.O. levels would increase a maximum of 1.2 ppm, but would remain substantially below the N.A.A.Q.S.

In his September 13, 1988 letter (see p. VII.A-21) the State Historic Preservation Officer states the site would not be adversely affected by any of these options. The criteria of adverse effect were found inapplicable because of the integrity of the site, and the location, design, material, and workmanship would not be significantly diminished. The site will not be damaged, destroyed, or altered. There will be no right-of-way required from the site, nor will the site be isolated from the portion of its setting associated with its historicity. The Advisory Council on Historic Preservation has concurred with this determination (see letter on p. VII.A-5).

H-15 St. Pauls Church (BA 1182)

As shown on Figures II-13, II-16, and II-17, St. Pauls is located on Jerusalem Road, approximately 1/2 mile east of U.S. Route 1. None of the options being considered for Kingsville will have any physical effect (including visual and acoustic) on this site. The State Historic Preservation Officer has concurred that the site will not be affected in his September 13, 1988 letter because the undertaking will not alter the characteristics of the property which qualify it for the National Register. There will be no alteration of the site's location, setting, or use.

Archaeological Sites

The mixed historic/prehistoric site 18BA334 may be eligible for listing on the National Register of Historic Places. The prehistoric component contains five broken bifaces, three

cores and flakes which may represent a seasonal base camp. This site may yield information regarding function, regional settlement patterns and prehistoric technology important to an understanding of prehistory to the region. The twentieth century material adjacent to the right-of-way is not considered potentially significant. The Maryland Historical Trust recommended that the site be protected by fencing and avoided during construction. This will be done.

Artifact scatter 18BAX202 may represent activities related to a nineteenth century tanyard. This site is located 240 meters west of proposed right-of-way. Testing revealed a charcoal-bearing organic layer which may represent residue from the tanning process. However, no historic artifacts from this period were recovered. The Maryland Historical Trust recommended that this site be avoided during construction. This will be done.

Summary of Recommendations

Both site 18BA334 and 18BAX202 are considered potentially significant cultural resources because of the information they may contain important to history or prehistory. Both sites have minimal value for preservation in place. The views of The Maryland Historical Trust and their recommendations are contained in the letter dated September 1, 1988 (p. VII.A-18) Section 106 procedures are complete for this project.

G. VISUAL IMPACTS

1. Introduction

Portions of the study corridor are becoming urbanized at an increasing pace. Residential and commercial development is transforming the once rural landscape into

shopping districts and housing developments. The proposed Six-Lane Alternative has been designed to accommodate this growth and may, by its very appearance, promote this sense of urbanization.

In order to mitigate these potential visual impact, a streetscape study was conducted for the corridor.

A site investigation for the project revealed that there are four distinct treatment areas for this road corridor. They are as follows:

- a. From Silver Spring Road (Station 130+00) to proposed Honeygo Boulevard (Station 264+50)
- b. From proposed Honeygo Boulevard (Station 264+50) to Goettner Road (Station 404+50)
- c. The Kingsville area from Goettner Road (Station 404+50) to Station 442+80+ north bound traffic lanes only
- d. From Station 442+80+ to Maryland 152 (Station 593+00)

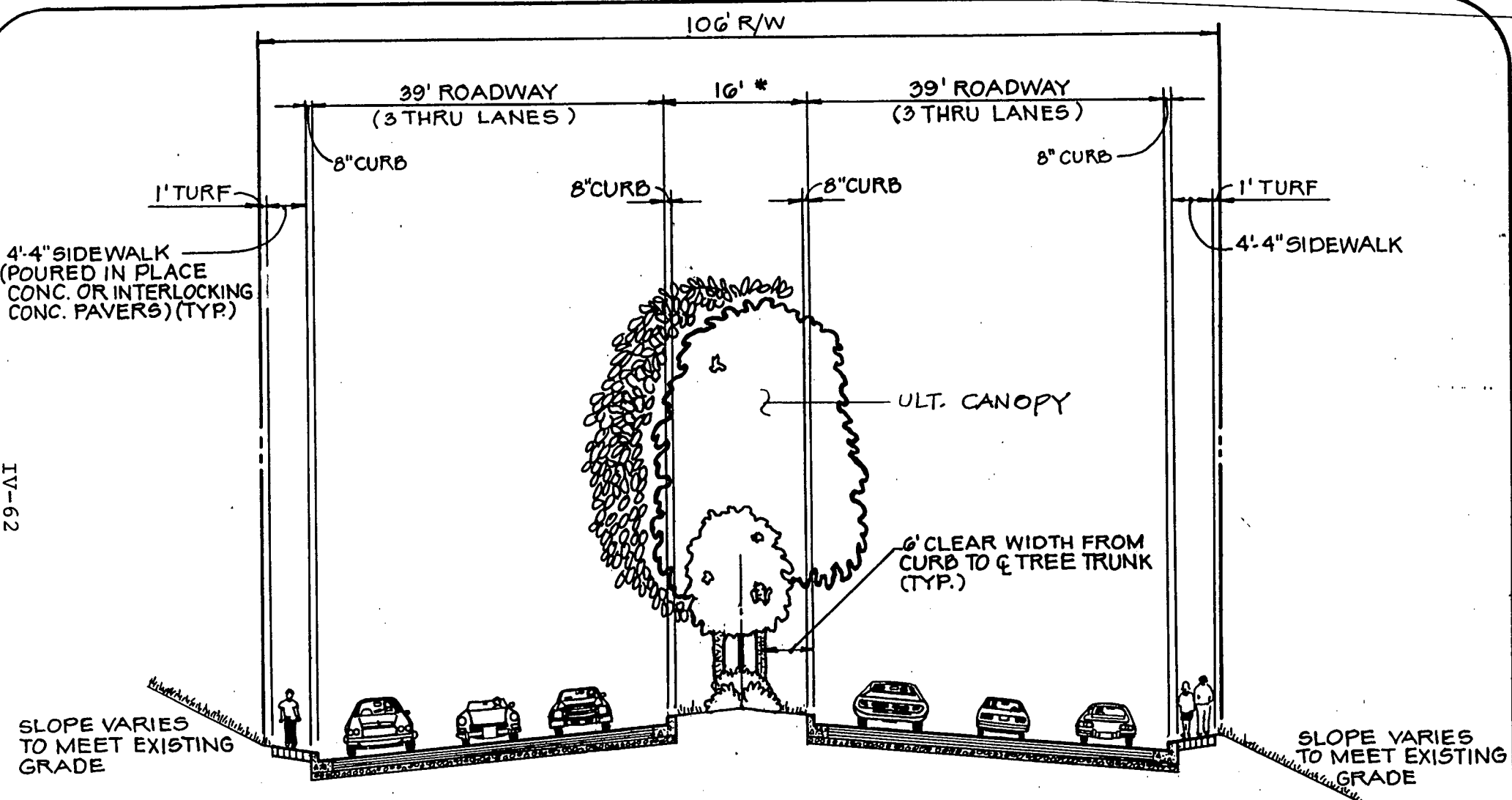
Because of the general nature and scope of this study, it is appropriate to combine areas one and three for one set of recommendations and areas two and four for another set of recommendations.

2. Recommendations for Areas One and Three (see Figures IV-2 and IV-3 for Typical Section)

a. Raised Central Median Treatments

In general, the opportunity exists in Areas One and Three for locating a combination of major deciduous

IV-62



4'-4" SIDEWALK
 (POURED IN PLACE
 CONC. OR INTERLOCKING
 CONC. PAVERS) (TYP.)

SLOPE VARIES
 TO MEET EXISTING
 GRADE

SLOPE VARIES
 TO MEET EXISTING
 GRADE

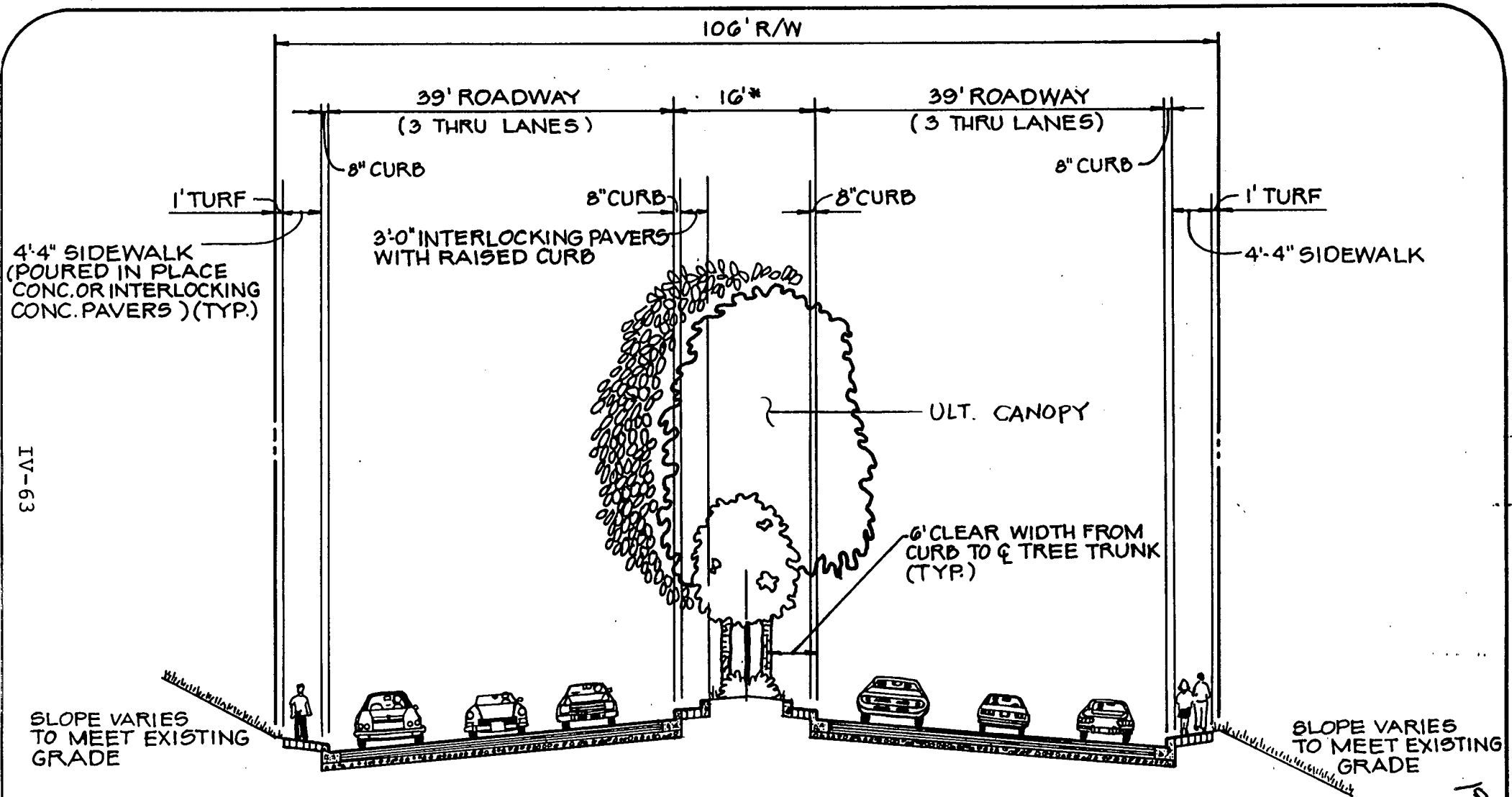
- * CENTRAL MEDIAN
- TAPER'S AT INTERSECTIONS
- MAJOR AND MINOR DECIDUOUS TREES
- DECIDUOUS AND EVERGREEN SHRUBS
- TURF

US ROUTE 1

Silver Spring Rd To Maryland Route 152

Figure IV-2
Streetscape Recommendations

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- * CENTRAL MEDIAN
- TAPERS AT INTERSECTIONS
- MAJOR AND MINOR DECIDUOUS TREES
- DECIDUOUS AND EVERGREEN SHRUBS
- TURF

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US ROUTE 1
 Silver Spring Rd To Maryland Route 152
Figure IV-3
Streetscape Recommendations

trees (ultimate canopy shown on Figures IV-1 thru IV-3), minor deciduous trees, deciduous and evergreen shrubs, which are all tolerant of typical suburban conditions, into a raised central median. Because of the large scale (wide roadway section), the planting emphasis within the central median should be placed on major deciduous trees. This section of the corridor lends itself well to the placement of major deciduous trees within the central median due to the constraint of overhead power lines to be located along both right-of-way lines.

More specifically, there are two recommended treatments for the central medians.

- Grass median with plantings

For the 16 feet full width median areas and tapered median areas down to 12 feet in width, locate alternating rows of major deciduous trees. Per SHA practice, there must be a minimum six feet of clear width from face of curb to centerline of a tree trunk. Minor deciduous trees, as well as deciduous and evergreen shrub masses may also be located within the median, provided that ample vehicular site distance can still be achieved. Also, the shrub masses should be located in a manner whereby they will not be damaged by snow plowing activities.

For tapered median areas between eight feet and twelve feet in width, trees should be substituted with shrub masses and turf. The shrub masses may be limited to low varieties that can withstand a snow load, and where applicable, will not impair proper site distance requirements.

193'

For maintenance purposes, any median areas eight feet and less in width should be paved. Due to anticipated construction costs, if the area is eight feet or less in width, pavement may be composed of interlocking concrete pavers. If the area is four feet or less in width, pavement may be composed of interlocking concrete pavers or monolithic concrete curbing.

● Interlocking concrete paver median with plantings

This treatment features an interlocking concrete paver area on each side of the median adjacent to the back of curb. This paved area allows for:

- The separation of salt and snow loads from the planting beds
- Another viable, aesthetic approach
- Reduction in long term maintenance requirements

The planting philosophy for this treatment would be similar to that specified above under "Grass Median with Plantings". When the entire median width is less than eight feet in width, it will be paved entirely with interlocking pavers.

b. Sidewalk Treatments

Per the typical roadway section, a width of six feet remains between the face of curb and road right-of-way line. This allows for the standard 8" curb width, 4'-4" sidewalk width and a 1'-0" width of turf outside of the sidewalk. Typically, this 1'-0" width is accepted as the minimum required for a rounding to meet the existing slopes. Because of the minimal

width remaining to meet existing ground, the sidewalk is located adjacent to the curb.

The sidewalks may be paved with either interlocking concrete pavers or poured-in-place concrete. The area remaining between the sidewalk and right-of-way line will be planted with a hardy turf seed mixture or sod.

c. Possible Treatment for Area Beyond the Right-of-Way

Due to the constraints which eliminate the possibility of placing street trees between the sidewalk curb and right-of-way line, the feasibility of locating deciduous trees beyond this right-of-way line should be investigated as the project proceeds towards construction documents.

The logistics could be as follows:

- Individual property owners are given a list of deciduous trees to choose from which would be located only in their front yards. The design particulars would be worked out between SHA, the property owner and the design consultant.
- The quantity of trees allotted to each interested property owner would be based on the width of their frontage.
- The State would be responsible for direct costs incurred in planting the trees.

The selection of trees from which the individual property owners could choose would be limited so as to prevent a hodge-podge affect. The approved list

would be based on a number of parameters including their ability to withstand typical suburban conditions, as well as their growth characteristics. Due to overhead power lines being located along both sides of the right-of-way line, only small to medium sized trees should be on the approved list.

3. Recommendations for Areas Two and Four (see Figure IV-4 for Typical Section)

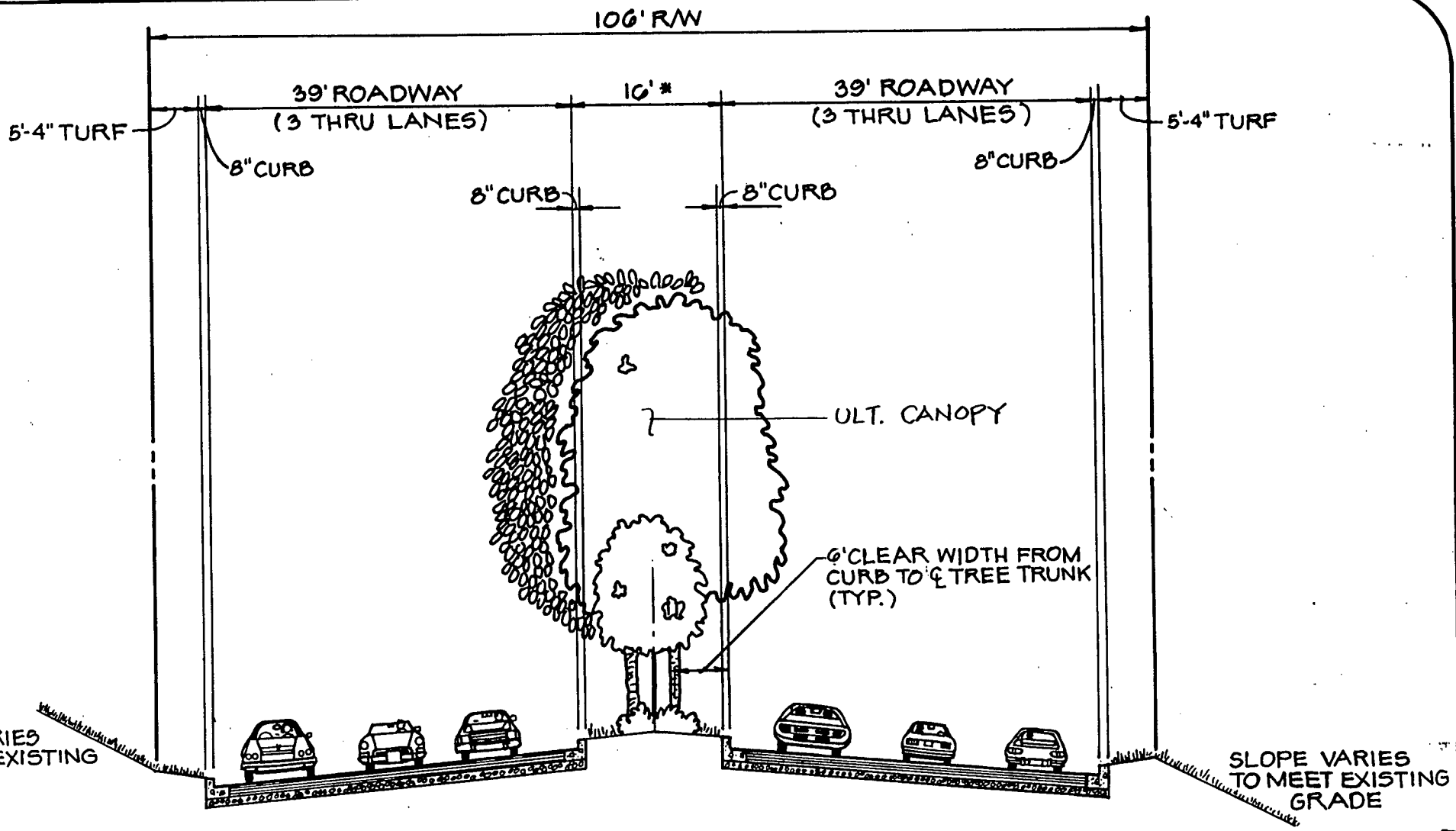
a. Raised Central Median Treatments

As with areas One and Three, there exists opportunity to locate a combination of major deciduous (ultimate canopy shown on Figures IV-1 thru IV-3) and minor deciduous trees, as well as deciduous and evergreen shrubs within the central median.

Because of the more rural setting of Areas Two and Four, these plantings should be located in informal massings all the while retaining the SHA practice of maintaining a six foot clear width between the face of curb and centerline of tree trunks.

Again, because of the large scale of the roadway section, a high degree of emphasis should be placed on locating major deciduous trees in this area. Masses of both evergreen and deciduous shrubs may also be located such that site distance for turning movements is not hampered and snow plowing activities would not cause damage to the plant materials. In areas where sight distance is not a concern, the shrub masses should be located to provide screening from headlight glare. The balance of the median should be planted with a hardy turf seed mixture.

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- *CENTRAL MEDIAN
- TAPERS AT INTERSECTIONS
- MAJOR AND MINOR DECIDUOUS TREES
- DECIDUOUS AND EVERGREEN SHRUBS
- TURF

US ROUTE 1

Silver Spring Rd To Maryland Route 152

Figure IV-4

Streetscape Recommendations

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For maintenance reasons, medians four feet and less in width should be enclosed with monolithic concrete curbing.

b. Sidewalk Treatments

Because of the more rural nature and lack of anticipated pedestrian traffic along these areas, sidewalks will not be required. Instead, the area between the back of the curb and right-of-way line should be planted with a hearty turf seed mixture. Tree planting is not recommended for this area because of the SHA policy of keeping a minimum six feet clear width between the face of the curb and centerline of tree trunks. Even if the six foot clear width were to be slightly reduced, the resultant affect would be that of a tree lined boulevard. This would not be consistent with the rural character of the area. Masses of shrubbery are also not recommended due to sight distance and maintenance concerns.

4. Areas Which Lend Themselves to Special Opportunities

a. Perry Hall

The school crossing at the intersection of Belair Road and Walter Avenue should be addressed with specific and appropriate design treatments. This should include a cross walkway traversing Belair Road composed of a different paving material, such as interlocking concrete pavers. Also, a very open planting scheme is necessary for the adjacent central medians in order to maximize sight distance.

The school crossing at the intersection of Belair Road and India Avenue, Joppa Road East should be similarly addressed. A crosswalk should be located from the south side of India Avenue, across Belair Road, connected to a second crosswalk across Joppa Road East. An opportunity exists for a special landscape treatment on the northeast side of the intersection of Belair Road with Joppa Road East which could be designed to accentuate or compliment the crosswalk in some manner.

The north, northeast and southeast sides of the intersection of Belair Road and Ebenezer Road/Joppa Road provides opportunities for special landscape treatments. If the State chooses to retain these properties, it could create a potential urban mini-park. Such a park would be an appropriate location for pedestrian amenities such as sitting areas, monuments, fountains, etc. Another option would be to retain these areas for green space and plant them with a combination of trees and shrubs. Local citizenry input should be solicited to see if there is a desire for an urban mini-park in this area.

b. Kingsville Area

The proposed intersection of Belair Road and Bradshaw Road/Jerusalem Road will create two unique green spaces within the median. One of these areas should incorporate a new "Kingsville, Maryland USA" sign, the original of which will be displaced by the proposed road widening. Special landscape treatment highlighting the sign should be an integral part of this median treatment. Local citizenry input should be solicited to help in determining the optimum

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location for the sign, as well as additional treatments which may be desired.

Triangular shaped median areas in the vicinity of station 410+00 and 450+40 created by the separation of the northbound and southbound traffic lanes also offer the opportunity for planting informal masses of trees and shrubs.

5. Conclusion

In summation, these general streetscape recommendations for the Belair Road widening project are put forth as a guide towards final design. As the project proceeds, the design consultant will have to become intimately familiar with the entire corridor and the impact that the road widening will have on the corridor. Opportunities for specific treatments, as well as particular locations and types of plant materials should be identified by a detailed site analysis. Anticipated pedestrian and vehicular movements, adjacent land uses, types of existing vegetation, underground and overhead utility locations, as well as anticipated maintenance programs are typical items which must be analyzed by the design consultant.

V. SECTION 4(f) EVALUATION

V. SECTION 4(f) EVALUATION

A. INTRODUCTION

Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. 303 (c)) requires that the proposed use of any land from a significant publicly owned public park or recreation area, wildlife or waterfowl refuge or from an historic site considered eligible for, or on the National Register of Historic Places be given particular attention. Final action requiring the taking of such land must document that there are no feasible and prudent alternatives to its use and that the project includes all possible measures to minimize harm to such resources.

B. DESCRIPTION OF PROPOSED ACTION

This project involves reconstruction of U.S. Route 1 (Belair Road) from Silver Spring Road in Baltimore County to Maryland Route 152 in Harford County.

The purpose of the Project Planning study is to develop and analyze improvement alternates for U.S. Route 1 to alleviate safety deficiencies and provide adequate capacity for vehicular traffic through the project Design Year 2015.

U.S. Route 1 crosses the Gunpowder Falls State Park (a Section 4(f) resource) at two locations within the study limits; the Gunpowder Falls ("Big Gunpowder") and the Little Gunpowder Falls. The existing roadway section in the vicinity of the Big Gunpowder Falls crossing consists of a four-lane, 44 foot roadway with 0 to 5 foot shoulders, contained within 60 feet of right-of-way. The bridge structure was originally a two-lane structure which was

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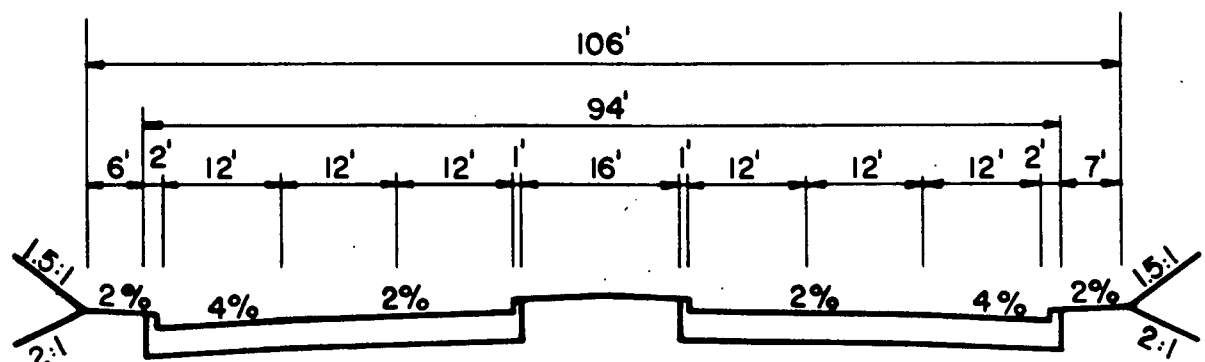
widened to four-lanes in the 1930's. The structure was topped by floodwaters of Hurricane Agnes in 1972 and both approach embankments were washed away. The parapets of this structure have also been severely deteriorated by age as well as vehicular accidents.

The existing roadway at the Little Gunpowder crossing is essentially the same as the Big Gunpowder crossing. The bridge at the Little Gunpowder, however, is not inundated by a 100-year flood and does not exhibit apparent signs of deterioration.

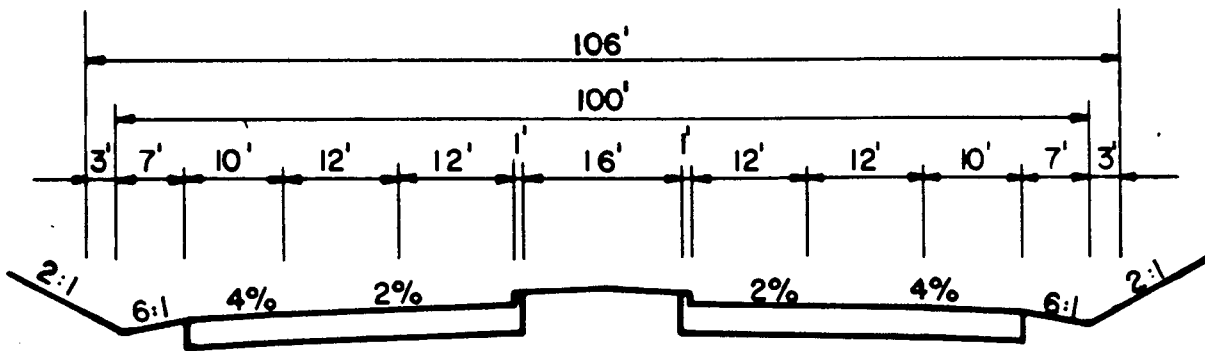
The average daily traffic in the vicinity of the Big Gunpowder is 21,000 vehicles and is projected to increase to 43,000 vehicles per day by the year 2015. The ADT at the Little Gunpowder crossing is projected to increase from 17,000 to 39,000 during the same period. The No Build Level of Service for the Big Gunpowder section of U.S. Route 1 will be LOS 'E' during the design year peak hour. The Little Gunpowder section would experience a LOS 'F' under the No Build conditions.

The accident history in the vicinity of the Big and Little Gunpowder crossings also supports the need for roadway improvements. Although the overall accident rate is somewhat lower than the statewide average for similar facilities, the rate for head-on collisions was substantially higher than the statewide average. A more detailed discussion of accident rates is provided in Section I.

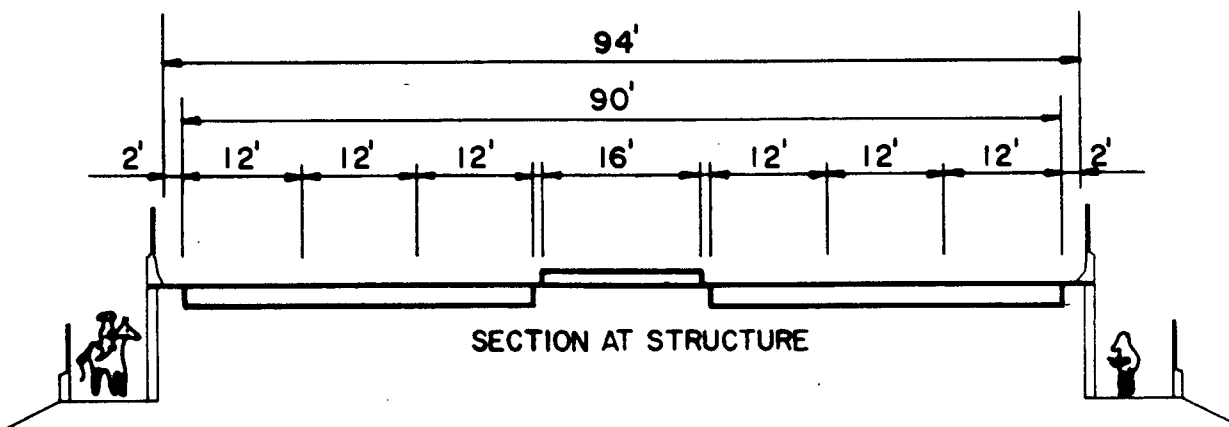
In order to satisfy the need for safety and capacity improvements, this project proposes to widen the facility from 4 lanes to 6 lanes and provide adequate separation of opposing traffic. The typical section for various stages of the Big Gunpowder Crossing is shown on Figure V-1. As shown on Figure V-1, the right-of-way width will increase to 106



6 LANE OPEN ROADWAY SECTION
W/GRASS MEDIAN
ULTIMATE APPROACHES



INTERIM APPROACHES



GUNPOWDER FALLS STATE PARK

U.S. ROUTE 1 STUDY

FIGURE V-1

SECTION 4(f) EVALUATION

20.4

feet, with an additional 28 feet of paving. The opposing traffic will be separated by a 16-foot raised grass median.

It is anticipated that the Little Gunpowder typical section would be the same as the ultimate 6-Lane section shown on Figure V-1.

In the Big Gunpowder section, the existing U.S. Route 1 bridge would be replaced with concrete steel arches. In addition, the horizontal alignment would be changed to improve the sight distance on both approaches, with the new crossing located just east of the existing structure. This new structure will carry all northbound and southbound lanes. The existing bridge would be required to maintain traffic during construction of the project, but would be removed after completion. The vertical alignment of the bridge and approaches would be raised above the 100-year floodplain elevation.

The proposed structure at the Little Gunpowder crossing will be determined during final design. No substantial change would be made to the horizontal or vertical alignment. The design speed of both crossings would be 50 mph.

The existing conditions of the section of U.S. Route 1 from Miller Road to Sheradale Drive (which includes the bridge at Big Gunpowder Falls) has a higher accident rate than the statewide average. The opposite direction rate in this section was 60% higher (29.1 versus 17.96 per 100 million vehicle miles - 100/mvm) than the statewide rate from 1985 through 1987. In addition, the rate for nighttime accidents was one-third higher than the statewide rate for this type of accident from 1985 through 1987 (47 versus 35.68 per 100/mvm). Also, the wet surface accidents rate was 26% higher than the statewide rate (35 versus 26.39 100.mvm).

Over the past few years, the State Highway Administration has attempted to improve the traffic safety in this area with maintenance projects, such as reflector lights in the pavement, guard rail, pavement roughening and overhead lighting. These projects have helped somewhat to improve traffic safety; however, improved horizontal and vertical alignments in addition to opposing traffic separation will be necessary to reduce the severe accident rate at the Big Gunpowder location.

For these reasons, the Big Gunpowder Falls bridge reconstruction may take place in advance of the U.S. Route 1 - Silver Spring Road to MD 152 mainline project.

The bridge replacement and approach roadway at the Big Gunpowder Falls may be advanced as an SHA maintenance project. No federal/aid highway funds will be involved in the replacement of the crossing of the Big Gunpowder Falls. The project would extend from Miller Road to Sheradale Drive, a distance of approximately one (1) mile. These project limits were determined based upon design requirements, such as horizontal and vertical alignments (meeting AASHTO standards), lateral stream involvement and construction sequencing for maintenance of traffic and stream diversion. This improvement has independent utility (i.e., is usable and is reasonable expenditure even if U.S. Route 1 is not widened) and is compatible with the construction of the Six-Lane Alternate proposed for U.S. Route 1. This improvement is necessary for the safety reasons previously cited in Sections IV and V.

In summary, the purpose of the U.S. Route 1/Big Gunpowder Falls bridge replacement project is to replace the bridge structure; to improve traffic safety by improving the inadequate horizontal and vertical approach alignments; to prevent head-on collisions by providing median traffic

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barriers; and to raise the structure above the Gunpowder Falls 100-year floodplain elevation.

Sufficient right-of-way would be acquired for an ultimate six-lane facility (approach roads and bridge) including equestrian passage under U.S. Route 1. An interim improvement consisting of four lanes, shoulders and a raised median to provide safety for left turning vehicles would be provided. In the future, this section would be restriped to accommodate six lanes.

As discussed previously, the Little Gunpowder crossing will involve widening the approaches from 4 to 6 lanes and replacing the existing structure very near its current location. This project would probably be implemented during the later stages of the proposed phased construction discussed in Section II.

C. DESCRIPTION OF 4(f) RESOURCE

As noted above, the State Highway Administration intends to develop the crossing of the Big Gunpowder portion of the Park with State funds. This improvement is logical and has independent utility as discussed above. The proposed State funded project is designed to meet current design standards as a four lane facility and will accommodate an ultimate six lane facility without requiring any additional property from the Park. However, even if Section 4(f) approval were needed for use of Park property, this document substantiates that there is no feasible and prudent alternatives to the use of this Section 4(f) resource and that all measures to minimize harm have been included in the proposed project.

Gunpowder Falls State Park is located along two stream valleys in northeast Maryland, those of the Big and Little Gunpowder Falls. The streams extend beyond the park

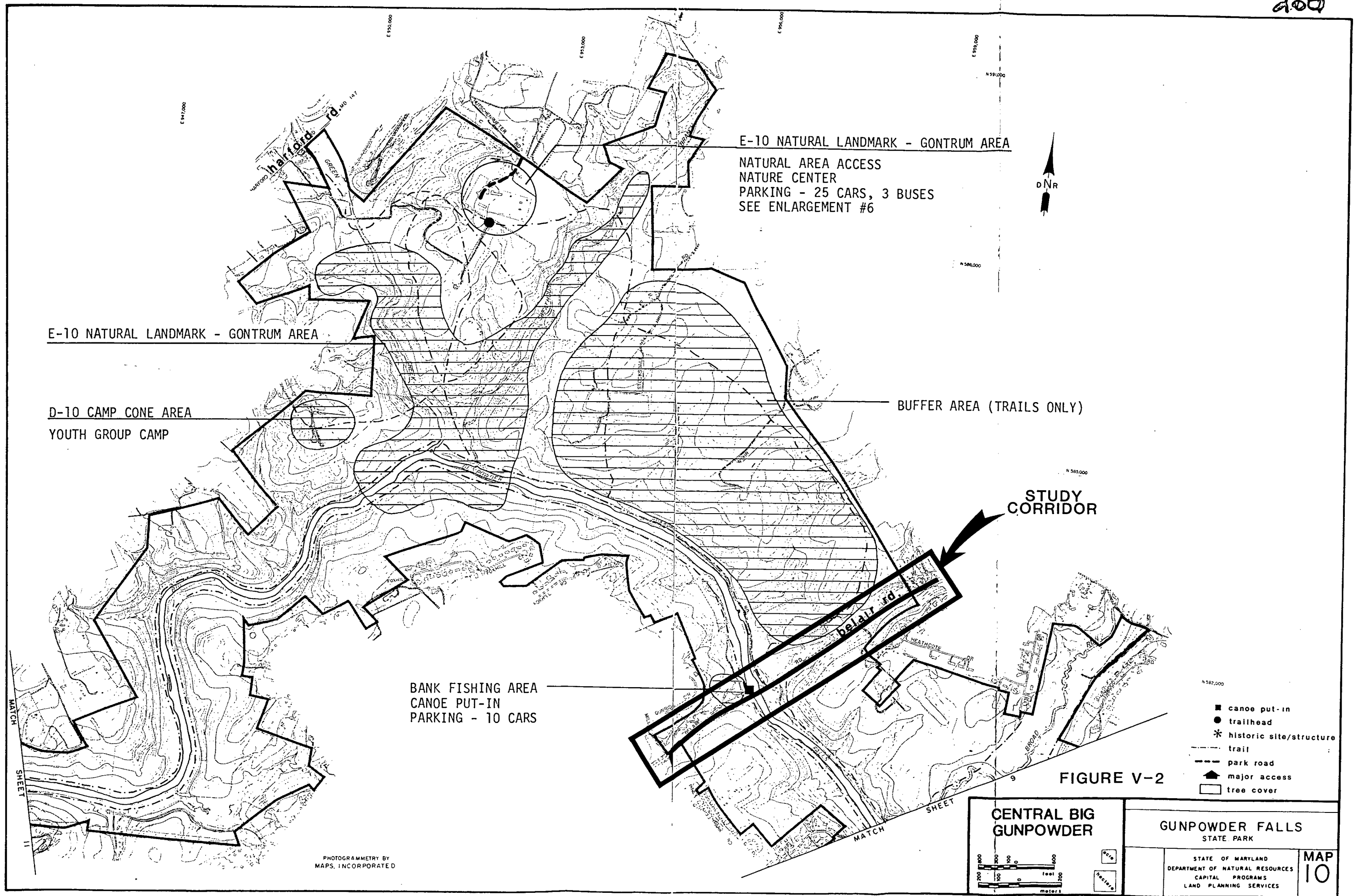
boundaries. The Big Gunpowder actually has its origin in southern Pennsylvania, while the Little Gunpowder begin in extreme northwest Harford County. Approximately 75% of the park is in Baltimore County, while the remaining 25% is in Harford County. It is one of the largest state parks in Maryland. Ultimately, the park will consist of over 15,000 acres. Figures V-2 and V-3 illustrate the relative relationship between U.S. Route 1 and the State Park.

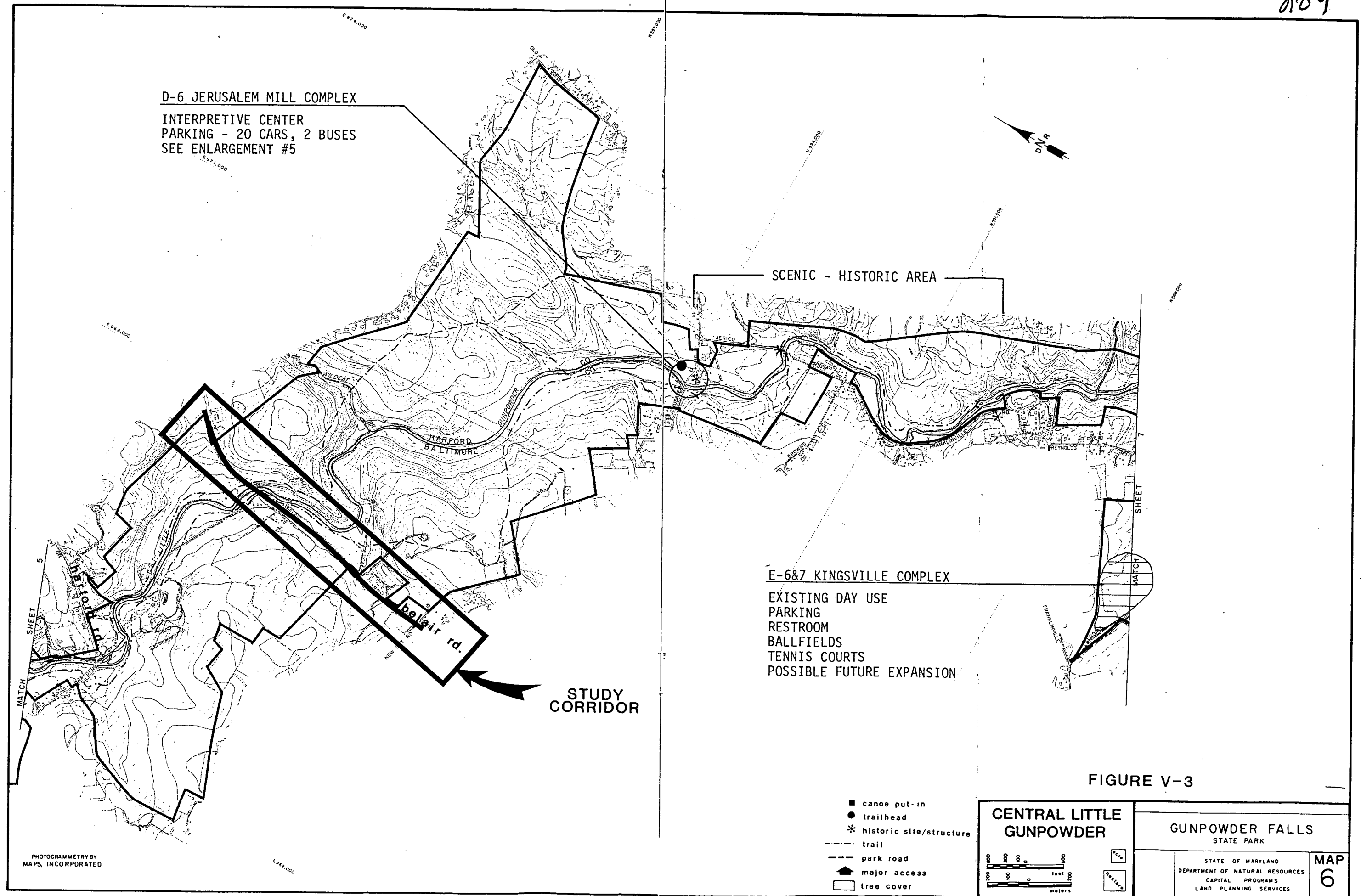
The Big Gunpowder portion of the Park extends approximately 5-1/2 miles west of U.S. Route 1 (to the Loch Raven Reservoir) and 5 miles east of U.S. Route 1 (to Bird River). The Little Gunpowder portion of the Park extends approximately 8 miles northwest (to Jarrettsville Pike) and 6 miles southeast (to Bird River). Figure III-6 partially illustrates the linear nature of Gunpowder Falls State Park.

Current use of the park in the vicinity of both U.S. Route 1 crossings is passive. There are hiker/equestrian trails on both sides of the Falls at both the Big Gunpowder and Little Gunpowder sites; however, riders must walk their horses under the bridge structures due to insufficient vertical clearance.

There is a bank fishing/canoe put-in area in both the southwest and southeast quadrants of the Big Gunpowder/U.S. Route 1 crossing. There is also unpaved parking for approximately 10 cars at this site.

There are no formal improved recreational facilities in the vicinity of the Little Gunpowder crossing. There is no vehicular access to the Little Gunpowder portion of the Park from U.S. Route 1. There are several residential structures on the property (see Figure II-14). These properties are owned by the Department of Natural Resources and are occupied by tenants. None of them is used for Park associated activities. There will be no impact to those structures from this project.





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Gunpowder Falls State Park is used primarily during summer weekends for hiking, horseback riding, canoeing, biking, fishing and tubing. Usage varies depending upon time of year and weather. The park is owned by the State of Maryland and is administered by the Department of Natural Resources (DNR), Capital Programs Administration. Gunpowder Falls State Park is crossed by many major and secondary roads, most of which run northeast-southwest. Included are U.S. Route 40, MD Route 7, Belair Road, and Harford Road. Informal, passive use is permitted at these access points.

D. DESCRIPTION OF IMPACTS

1. No Build Alternate

The No Build Alternate will not require right-of-way from either section of Gunpowder Falls State Park. The roadways through these sections of the park would, however, experience increased traffic congestion and accidents. Increased traffic congestion would have an adverse affect on vehicular, pedestrian and equestrian access to the Park over the next 20 years.

2. Six-Lane Alternate (Selected Alternate)

a. Big Gunpowder Crossing

The Six-Lane Alternate will require approximately 13.0 acres of right-of-way from the park for the Big Gunpowder crossing. An additional acre (not discussed in the DEIS) will be needed for storm water management and drainage control for roadway runoff. Most of the remaining acreage is needed for supporting cut slopes. Ordinarily, slopes are acquired in the form of an easement; however, DNR has requested that the slopes be acquired in fee

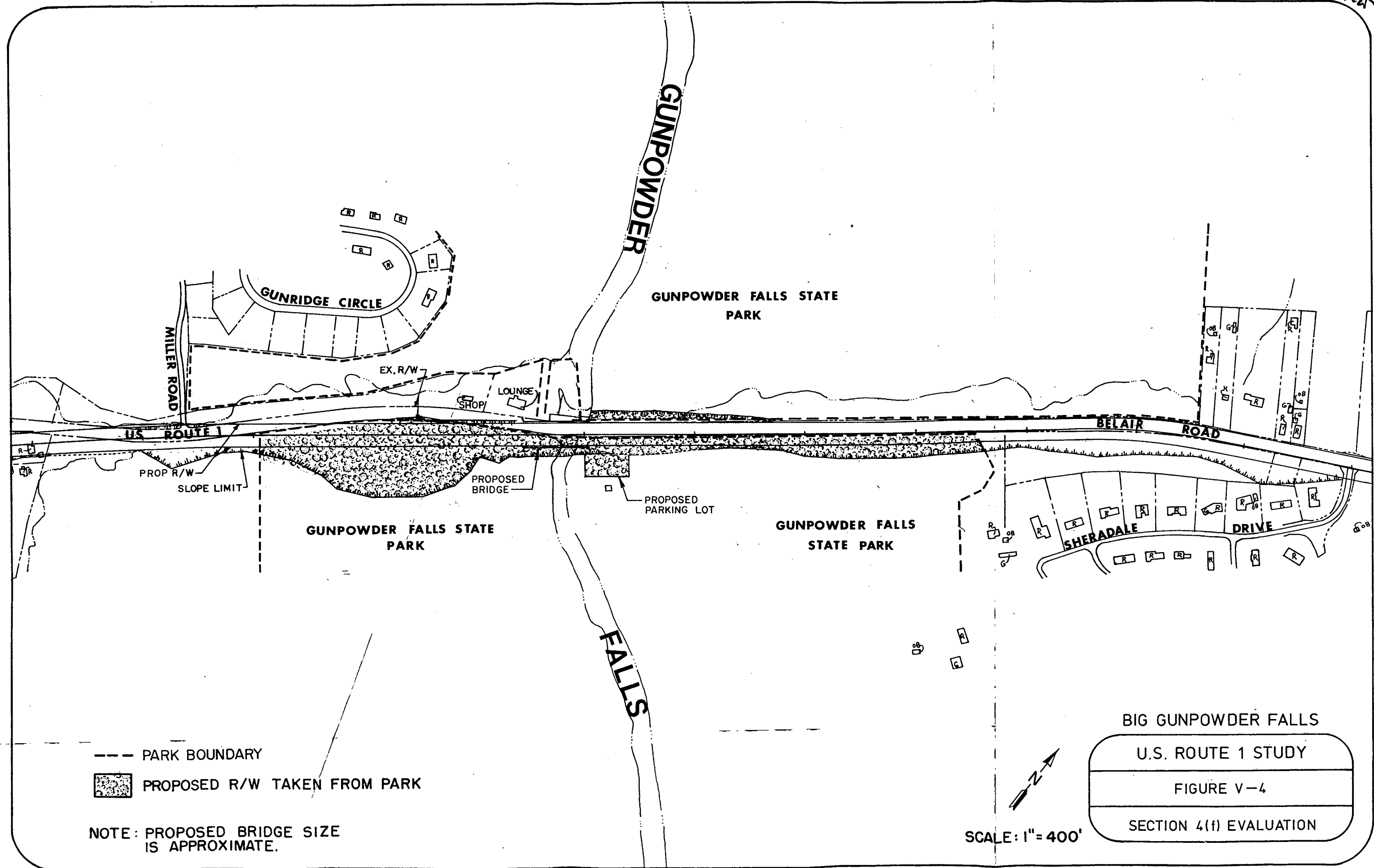
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simple. In addition, approximately 0.7 acres of temporary construction easement will be required to construct the new parking lot. This parking lot is for park usage and will be maintained by DNR. Figure V-4 indicates the location of the required right-of-way.

The project will not involve impacts to natural resources. A small amount (10 acres ±) of natural vegetation would be cleared for supporting slopes; however, most of this area will be re-vegetated after construction. Appropriate erosion and sediment control and stormwater management measures will be stringently employed, as required by the State Highway Administration and the Maryland Department of the Environment. Approximately 0.2 acres of riverine wetland would be affected by this project. The proposed project will be constructed to assure adequate passage of the 100-year floodplain. The project will not affect ground water supplies or productive prime farmlands.

There are no standing structures on or eligible for the National Register affected by this project. The existing bridge is not included on the National Register. There are no known archaeological resources affected by this project.

The air quality analysis indicates that there will be no violations of the National Ambient Air Quality Standards. The noise analysis for NSA 15 (see p. IV-44) indicated that noise levels will exceed FHWA Noise Abatement Criteria. However, activities adjacent to the roadway are not precluded by noise



--- PARK BOUNDARY
 [Stippled Box] PROPOSED R/W TAKEN FROM PARK

NOTE: PROPOSED BRIDGE SIZE IS APPROXIMATE.

SCALE: 1" = 400'

BIG GUNPOWDER FALLS
 U.S. ROUTE 1 STUDY
 FIGURE V-4
 SECTION 4(f) EVALUATION

and would not be substantially impaired. Noise abatement is not being proposed.

Noise abatement within Gunpowder Falls State Park would not be reasonable and feasible due to problems associated with emergency park access, equestrian access, aesthetics at bridge crossings, and cost. The cost of providing noise abatement (i.e. concrete walls) has been estimated to be \$64,125. This amount exceeds SHA's cost/effective criteria (\$40,000 per residence based on one residence per 125 feet of park property). Earth berms would be a less expensive alternative (\$34,600 per residence); however, they would require an additional 12 acres of right-of-way from the park and would not protect any active park recreational facilities (see P. IV-45).

During construction, there may be temporary fugitive dust emissions and increased noise levels. Mitigation measures will be taken to minimize these temporary effects for this project. The water quality of Gunpowder Falls will be protected during and after construction through the use of stormwater management practices. Traffic will be adequately maintained during construction.

Access to the Big Gunpowder portion of the Park will be provided at the entrance to the new parking lot on the north side of the Big Gunpowder.

b. Little Gunpowder Crossing

The Six-Lane Alternate will require approximately 6.4 acres of right-of-way from the park for the Little Gunpowder crossing. Most of the acreage is needed for supporting cut slopes. Ordinarily,

slopes are acquired in the form of an easement; however, DNR has requested that the slopes be acquired in fee simple. Figure V-5 indicates the location of the required right-of-way.

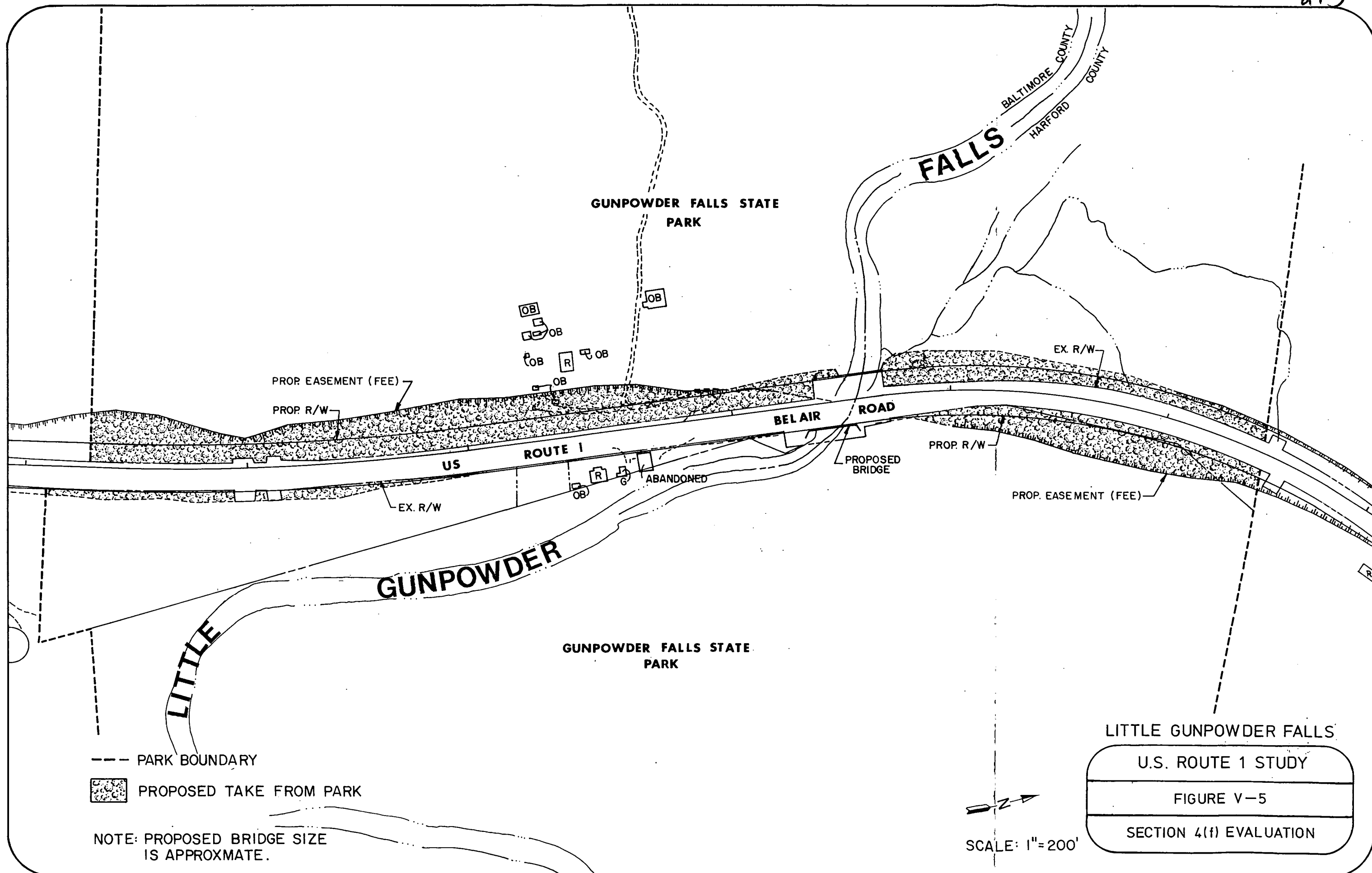
The potential for increased water quality impacts is low at the Little Gunpowder crossing since no realignment of the bridge and approaches is required. Stringent enforcement of sediment and erosion control regulations and careful construction practices will minimize environmental impacts.

Approximately 0.2 acres of riverine wetland would be affected at the Little Gunpowder crossing. The project will not affect ground water supplies or productive/prime farmlands.

There are no standing structures on or eligible for the National Register affected by this portion of the project. The existing bridge is not included on the National Register. There are no known archaeological resources affected by this project.

The air quality analysis indicates that there will be no violations of the National Ambient Air Quality Standards. The noise analysis for NSA 3 (see p. IV-38) indicated that noise levels will exceed FHWA Noise Abatement Criteria; however, noise abatement measures would not be cost effective.

Noise abatement within Gunpowder Falls State Park would not be reasonable and feasible due to problems associated with emergency park access, equestrian access, aesthetics at bridge crossings, and cost. The cost of providing noise abatement (i.e. concrete



--- PARK BOUNDARY
 [shaded box] PROPOSED TAKE FROM PARK

NOTE: PROPOSED BRIDGE SIZE IS APPROXIMATE.

SCALE: 1" = 200'

LITTLE GUNPOWDER FALLS
 U.S. ROUTE 1 STUDY
 FIGURE V-5
 SECTION 4(f) EVALUATION

walls) has been estimated to be \$61,128. This amount exceeds SHA's cost/effective criteria (\$40,000 per residence based on one residence per 125 feet of park property). Earth berms would be a less expensive alternative; however, they would require an additional 12 acres of right-of-way from the park without a corresponding increase in noise benefit (see p. IV-38).

During construction, there may be temporary fugitive dust emissions and increased noise levels. Mitigation measures will be taken to minimize these temporary effects for this project. The water quality of Little Gunpowder Falls will be protected during and after construction through the use of stormwater management practices. Traffic will be adequately maintained during construction.

The 16-foot grass median provided by this project will eliminate left turns and U-turns between New Cut Road (which is one-quarter mile south of the Park) and Reckord Road (which is 0.3 mile north of the Park). No adverse travel is expected, however, since there is no current vehicular access to the Little Gunpowder portion of the Park.

3. Other Alternates Considered

A Four-Lane Alternate through the Park was evaluated as a measure to minimize harm. The Four-Lane Alternate would require 7 acres of right-of-way at the Big Gunpowder Crossing and 3.8 acres at the Little Gunpowder Crossing (a total of 7.2 acres less than the Six-Lane Alternate). Neither the Four-Lane Alternate nor the No Build Alternate are prudent and feasible because they fail to provide the needed traffic capacity in the design year.

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The Four-Lane Alternate would fail to provide adequate overall capacity for the mainline and most intersections in the design year. High projected traffic volumes in the northern and southern sections of the study area in addition to steep grades through Kingsville and the park areas create capacity demands which could not have been accommodated with only a four-lane section. The only acceptable intersections under the Four-Lane Alternate would have been Forge Road and Mt. Vista Road. Table V-1 lists the Level of Service that would occur for the Four-Lane Alternate.

The Four-Lane Alternate would have also created maintenance of traffic problems for the two bridge structures by reducing through traffic to 2 lanes during construction.

TABLE V-1
Level of Service Summary

| <u>U.S. Route 1 @</u> | <u>No Build L.O.S. AM/PM</u> | <u>4-Lane L.O.S. AM/PM</u> | <u>6-Lane L.O.S. AM/PM</u> |
|-----------------------------|--------------------------------------|------------------------------------|------------------------------------|
| Silver Spring Road | F/F | F/F | F/F |
| Joppa Road/Ebenezer Road | F/F | F/F | E/F |
| Joppa "T" | F/F | F/F | C/D |
| Chapel Road/Baker Lane | F/F | D/E | B/C |
| Forge Road | C/E | C/C | A/A |
| Honeygo Blvd./Gunview Blvd. | NA/NA | E/E | D/D |
| Mt. Vista Road | B/C | A/B | A/A |
| Sunshine Ave./Bradshaw Road | F/F | E/E | C/C |
| MD Route 152 | F/F | D/F | C/F |

E. AVOIDANCE ALTERNATES

Since Gunpowder Falls State Park is a linear stream valley park, which extends eight miles to the northwest and three miles to the southeast, a shift in the alignment of U.S. Route 1 would not avoid the taking of park property. A large

shift in the alignment would also fail to provide improvements to the transportation corridor that currently serves the growing communities of Perry Hall, Whitemarsh and Fallston. The No Build Alternate is also, obviously, a park avoidance alternate. The No Build Alternate, however, would not provide improvement in traffic safety or capacity (See Table V-1). This would result in increased traffic congestion as traffic volumes increase. Failure to provide adequate sight distance and opposing traffic separation would also lead to an increased accident rate.

F. MEASURES TO MINIMIZE HARM

In consultation with DNR, the following mitigation measures have been developed for the Big Gunpowder crossing:

- Use of 1.5:1 cut slopes to minimize right-of-way
- Use of curb and gutter to reduce cross section and thus minimize right-of-way
- Special signing for park access
- Full in-kind replacement of park property taken for right-of-way and easement. Replacement property will be contiguous to the existing park and outside the ultimate acquisition area which is currently proposed by DNR. DNR has identified the SHA salt dome area as a potential replacement area for both sections of the park affected by this project.
- Two emergency access points will be provided
- Bridge structure at Big Gunpowder will be designed to accommodate the equestrian trail

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- Disturbance to riverine habitat during construction will be mitigated through prohibition of construction during spawning (March 1 to June 15), use of catch nets and strict enforcement of sediment and erosion control.
- The existing parking lot will be relocated. A median opening and left turn slot will be provided at the new parking lot entrance.
- Lighting will be provided in the equestrian tunnel, as well as the new parking lot.
- Security gates will be provided at the equestrian tunnel entrances and at the entrance to the parking lot.

Coordination of mitigation measures for the Little Gunpowder crossing has not been finalized; however, the mitigation measures would include, at a minimum:

- Full in-kind replacement of park property taken for right-of-way and easement
- Use of 1.5:1 cut slopes, where feasible, to minimize right-of-way
- Use of curb and gutter to reduce right-of-way
- Disturbance to riverine habitat during construction will be mitigated through prohibition of construction during spawning, use of catch nets and strict enforcement of sediment and erosion control.

G. COORDINATION

Coordination with DNR regarding possible impacts to Gunpowder Falls State Park has been ongoing throughout the planning

process. DNR is in agreement with the need to acquire land for this project and with the proposed mitigation measures.

The Maryland State Highway Administration (SHA) and the Department of Natural Resources, Capital Programs Administration (DNR) have met to discuss parkland impacts associated with the U.S. Route 1 bridge replacement over Big Gunpowder Falls. Key points discussed at these coordination meetings are as follows:

January 13, 1988 - SHA requested information regarding the funding sources for the affected park acreage.

- DNR would like all the affected acreage replaced regardless of the funding source. DNR needs to identify potential replacement sites. Further investigation is required to determine if excess SHA property would suffice for replacement acreage. The inclusion of SHA property within the boundary needs to be clarified.
- The amount of affected acreage includes the Beiderman property.
- All slope easements are to be purchased in fee. Emergency access to the park is requested on either side of the bridge, and 12 feet vertical under clearance would be provided to accommodate equestrian trails.

August 30, 1988 - The Bureau of Bridge Design discussed concepts for using steel arch plates rather than a bridge crossing. SHA was unsure whether the structure could accommodate equestrian trails on both sides of the structure. DNR requested that a trail be located on the east side of Big Gunpowder Falls if two trails could not be provided.

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- DNR expressed concern regarding the safety of pedestrians and horses along this area of U.S. 1 and requested that SHA investigate designing typical sections with wide sidewalks or wide shoulders to accommodate both.

The typical sections have been modified so that it would be consistent with the Six-Lane Alternate for the widening of U.S. 1 from Silver Spring Road to MD 152.

- DNR stated that the Beiderman tract had officially been acquired by the Park and, therefore, additional parkland would now be impacted. This tract will be utilized as a parking lot (to be constructed by DNR) with signing to the lot provided by SHA. DNR will identify for SHA possible access points into this tract so that they can be incorporated into the design.
- SHA will replace all the impacted parkland. SHA will contact DNR for suggested replacement sites.
- SHA stated that 1/2 to 1 side slopes would be considered until the 15' bench and the 1-1/2 side slopes would be used.
- DNR asked SHA to investigate natural cover (crown vetch was suggested) over the slopes to make the cut more aesthetically appealing.
- SHA stated that soil boring samples recently completed revealed solid rock which would need to be cut in the park area.

September 21, 1988 - SHA and DNR representatives met at the U.S. 1 bridge over the Big Gunpowder Falls on this date.

222

Equestrian trails were identified in all four quadrants of the existing bridge crossing.

- SHA told DNR that the existing parking lot which exists on the southeast quadrant of the bridge will be taken as part of the improvements. DNR then requested that SHA provide a new parking lot made of gravel on the Beiderman tract to accommodate approximately 30 cars.
- SHA will design a tunnel on the north side of the structure under U.S. 1 for equestrian and rider passage from one side of U.S. 1 to the other.
- SHA stated a tunnel on the south side of the structure is not possible because the property on the southwest side is privately owned. (DNR has only an easement on this privately owned property.)
- DNR again requested a typical section with wide shoulders or sidewalks to accommodate safe passage for park users.

In consultation with DNR, the following mitigation measures have been agreed upon:

- Use of 1.5:1 cut slopes to minimize right-of-way. (The approximate 13.0 acres of ROW reflects this condition.)
- Use curb and gutter to minimize right-of-way is under consideration for the ultimate facility.
- Bridge structures will be designed to accommodate equestrian trail (rider atop horse) on at least one side of the Big Gunpowder Falls. The clearance will be 12'0".

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- Special signing for park access.
- Full in-kind replacement of park property taken for right-of-way and easement. Replacement property will be contiguous to existing parklands.
- Two emergency access points will be provided; one in the northeast quadrant and one in the southwest quadrant.

February 24, 1989 SHA met with DNR at the Little Gunpowder Falls crossing. The purpose of this meeting was to discuss parkland impacts associated with the subject project, mitigation, and other relevant concerns of the Department of Natural Resources.

- SHA opened the meeting by showing DNR the proposed typical section through the park. It was highlighted that a 16' grass median was being used for aesthetics and 1-1/2 to 1 slopes to minimize R/W take.
- DNR was concerned about a house within the right-of-way which may be taken. They wanted to know if the tenant would be relocated. SHA said that if that occurs, the tenant would be relocated. DNR would also like to maintain use of the existing parking area on the southwest quadrant of the Little Gunpowder bridge. SHA pointed out that the parking area was within existing SHA right-of-way and when the road is widened, this area may not exist. The Consultant said that the area is now used for Harford County school bus turnaround.
- DNR indicated that there was a tract of land (SHA salt dome) where illegal hunting occurs and could not be policed. If possible, they would like to see this purchased to prevent the illegal hunting.

- DNR was curious as to the total amount of parkland being taken. SHA answered, "approximately 6 acres".
- DNR questioned whether flat arches would adequately serve the Little Gunpowder flow. SHA indicated that flow analysis had not been performed as of yet, but that the structure would be build to properly handle the flow.
- DNR identified existing equestrian trails on both the northern and southern ends of the bridge. The only crossing, however, exists on the north side of the bridge where a break in the guard rail accommodates the horses.
- The DNR representatives were in agreement to the grass median and to maintaining a break in the guard rail at the north end to accommodate the existing equestrian crossing if a crossing under the bridge could not be provided.
- DNR asked if there could also be a break in the grass median for the equestrian crossing. It was explained that the median would be curbed (4" to 6" high) and 16' wide and this would provide a safe means of crossing. However, where breaks in the median occur are further north and south of the bridge.
- The DNR representatives would like an equestrian underpass considered in the bridge design. This underpass would also be located at the northern end. SHA explained that he did not think a tunnel underpass (which is proposed at the Big Gunpowder) would be possible because the roadway will not be elevated to the extent it will be at the Big Gunpowder and additional right-of-way would be required for slopes. Mr. Goad

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(SHA) also stated that a bench under the bridge for equestrian passage would be considered in the design phase. He also mentioned his concern with the possible grade which would be needed for the horses to be able to cross beneath the bridge and then climb up the existing trail.

- DNR representatives saw no problems with acquiring temporary construction easements to build the new trail from the bench up to the existing trail.

- DNR asked when the advertisement dates were for both the Big and Little Gunpowder structures. SHA stated, "November, 1989", as the current advertisement date for the Big Gunpowder, with the Little Gunpowder construction as yet undefined.

- DNR would like to see a gate closing off entrances to the equestrian underpasses after park hours. This is being requested due to youths which party in the existing underpass beneath MD Route 24. This has resulted in the vandalizing of a few glass globes which cover lights in the underpass. There have also been citations of vagrants sleeping in the underpass. DNR also requested a gate be placed at the entrance to the parking lot for the Big Gunpowder to prevent use of the lot after park hours. This would be maintained by DNR personnel. SHA stated that this would be investigated, but could not be guaranteed.

Also, for the reasons cited above, DNR requested that either manual light switches or times lights be used to shut off lights in the tunnel of the Big Gunpowder after the park is closed.

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H. CONCLUDING STATEMENT

Based on the above information and analyses, there are no feasible and prudent alternatives to the use of land from Gunpowder Falls State Park at the crossings of the Big and Little Gunpowder Falls. All possible measures to minimize harm to the Park have been included in the proposed project.

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VI. DISTRIBUTION LIST

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VI. DISTRIBUTION LIST

U.S. Route 1 (Belair Road) Improvements
from Silver Spring Road in Baltimore County, Maryland
to MD Route 152 in Harford County, Maryland

Federal Agencies

Department of Agriculture
State Conservationist
Soil Conservation Service
4321 Hartwick Avenue (Rm. 552)
College Park, Maryland 20740

- * Mr. Jonatan Deason, Director
Office of Environmental Project Review
Room 4239
U.S. Department of the Interior
18th and C Streets, N.W.
Washington, D.C. 20240
- * U.S. Environmental Protection Agency
Region III
Mr. Jeffrey Alper, Chief (3ES41)
NEPA Compliance Section
841 Chestnut Street
Philadelphia, Pennsylvania 19107
- * Regional Director
National Marine Fisheries Service
Federal Building
14 Elm Street
Gloucester, Massachusetts 19130
- * Ms. Margaret A. Krengel
Regional Environmental Officer
Department of Housing and Urban Development
Philadelphia Regional Office, Region III
Liberty Square Building
105 South 7th Street
Philadelphia, Pennsylvania 19106-3392
- * Director NOAA/CS/EC/Room 6222
Department of Commerce
14th and Constitution Avenue, N.W.
Washington. D.C. 20230
- * Agencies that responded to the DEIS

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Federal Agencies (Continued)

Commander
U.S. Army Corps of Engineers
P.O. Box 1715
Baltimore, Maryland 21201
Attn: NABOP-F

Division of NEPA Affairs
Department of Energy
Room 4G 064
1000 Independence Avenue, S.W.
Washington, D.C. 20230

- * Mr. Peter N. Stowell
Regional Administrator
UMTA - Suite 714
841 Chestnut Street
Philadelphia, Pennsylvania 19107

Associate Director for Planning
Management and Demonstration
Urban Mass Transit Administration
400 7th Street, S.W.
Washington, D.C. 20590

Office of Economic Opportunity
Director
1200 19th Street, N.W.
Washington, D.C. 20506

Mr. Paul Giordano
Regional Director
Federal Emergency Management Agency
Liberty Square Building
105 South 7th Street
Philadelphia, Pennsylvania 19106
ATTN: Mr. Walter Pierson

State Clearinghouse

- * Ms. Mary F. Abrams
301 West Preston Street
Baltimore, Maryland 21201

State Agencies

Ms. Kathleen Fay
State Depository Distribution Center
Enoch Pratt Free Library
400 Cathedral Street
Baltimore, Maryland 21201

- * Agencies that responded to the DEIS

State Agencies (Continued)

- * Mr. Stan Wong
Water Resources Administration
Department of Natural Resources
Tawes State Office Building
Annapolis, Maryland 21401
- * Chesapeake Bay Critical Area Commission
Tawes State Office Building
Annapolis, Maryland 21401
- * Ms. Jo Ann Watson
Maryland Department of the Environment
Division of Standards and Certification
2nd Floor
201 West Preston Street
Baltimore, Maryland 21201
- * Maryland Department of Natural Resources
Capital Programs Administration
2012 Industrial Drive
Annapolis, Maryland 21401

Mr. Donald E. MacLauchlan
Director
Maryland Forest, Park and Wildlife Service
Department of Natural Resources
Tawes State Office Building
Annapolis, Maryland 21401
ATTN: Mr. James Burtis

Maryland Department of Transportation

Director
Public Affairs
MD Department of Transportation

Mr. Clyde E. Pyers, Director
Office of Transportation Planning
MD Department of Transportation

Office of Legal Council
Office of the Secretary
MD Department of Transportation

MD State Law Library
Upper Level Court of Appeal Building
361 Rowe Boulevard
Annapolis, Maryland 21401

- * Agencies that responded to the DEIS

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Elected Officials and Local Government Agencies

Senator Thomas L. Bromwell
James Senate Office Building
110 College Avenue
Annapolis, Maryland 21401-1991

The Honorable Dennis Rasmussen
County Executive
100 Court House
Towson, Maryland 21204

The Honorable Habern Freeman
County Executive
220 South Main Street
Bel Air, Maryland 21014

Baltimore County Planning and Zoning
Mr. P. David Fields, Director
County Office Building
Towson, Maryland 21204

Baltimore County Department of
Public Works
Mr. Gene L. Neff, Director
County Office Building
Towson, Maryland 21204

Harford County Planning and Zoning
Mr. William Carroll
220 South Main Street
Bel Air, Maryland 21014

Harford County Department of
Public Works
Mr. Thomas Smith, Director
220 South Main Street
Bel Air, Maryland 21014

Mr. Stephen E. Collins
Director, Department of Traffic Engineering
County Courts Building
Towson, Maryland 21204

Mr. Malcolm S. Aldrich
Director of Recreation and Parks
301 Washington Avenue
Towson, Maryland 21204

* Agencies that responded to the DEIS

Mr. Paul Reincke, Chief
Baltimore County Fire Department
800 North York Road
Towson, Maryland 21204

* Cornelius J. Behan, Chief
Baltimore County Police Department
400 Kenilworth Avenue
Towson, Maryland 21204

Mr. Ellsworth N. Diver, Chief
Baltimore County of
Bureau of Engineering
County Office Building
Towson, Maryland 21204

Mr. Thomas F. Smith
Harford County Division of Engineering
220 South Main Street
Bel Air, Maryland 21014

Mr. Stan Kozenewski
Director of Recreation and Parks
702 North Tollgate Road
Bel Air, Maryland 21014

Mr. Dominic Mele
Harford County Sheriff
P.O. Box 150
Bel Air, Maryland 21014

Mr. Rocko Gabriel
Harford County Fire Marshall
34 North Philadelphia Boulevard
Aberdeen, Maryland 21001

Others

Mr. Paul S. Jaronsinski
Vice President
Chairman, Transportation Committee
North East Coordinating Council
P. O. Box 44
Perry Hall, Maryland 21128

Mr. Ron Sanders, Chairman
Belair Road Citizen Advisory Committee
8811 Dearborn Drive
Overlea, Maryland 21236

Colorado State University
Document Librarian
Fort Collins, Colorado 80523

* Agencies that responded to the DEIS

VII.A. DRAFT E.I.S. COORDINATION



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TORREY C. BROWN, M.D.
SECRETARY

JOHN R. GRIFFIN
DEPUTY SECRETARY

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

April 17, 1986

PROJECT
DEVELOPMENT
DIVISION
APR 21 4 31 PM '86

Ms. Cynthia D. Simpson
Chief,
Environmental Management
State Highway Administration
P.O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

Re: Contract No. B 813-101-471
U.S. Route 1 from Gunpowder
Park to Md. Rt. 152

Dear Ms. Simpson,

This is in response to your letter of 4/4/86 dealing with requests for information on the fish fauna of Wildcat Branch and its tributary Rocky Branch, in connection with possible impacts to the fish and their habitat due to a possible widening of U.S. Rt. 1 to a 6-lane divided highway requiring approximately a 95-foot width.

Coldwater fisheries program personnel sampled the two streams in question in 1981. Results were as follows:

Date sampled: 11/23/81

Stream

Rocky Branch
Species collected

Black nosed dace
Creek chub
Rosyside dace
Common shiner
White sucker
Fantail darter
green sunfish
American eel

Wildcat Branch
Species collected

Black nosed dace
Creek chub
Rosyside dace

White sucker
Fantail darter

American eel

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A substantial portion of Wildcat Branch lies parallel to U.S. Route 1 and in close proximity to it. We anticipate that extensive widening would result in having to relocate Wildcat Branch, with the usual traumas to the aquatic ecosystem that are implicit in channelization/relocation operations. Since most of the length of Rocky Branch lies upstream from Rt. 1, impacts to this tributary would not be as severe as to Wildcat Branch.

Whereas no salmonids were found in either stream at the time of the 1981 sampling, it should be noted that:

- 1) Laurel Brook and Overshot Branch, both tributaries to the Little Gunpowder which enter the Little Gunpowder a short distance upriver from the junction of Wildcat Branch and Little Gunpowder, both have had brook trout documented in them;
- 2) Experimental stockings of brown trout at the covered bridge on Franklinville Road near Jerusalem Road (on the Little Gunpowder a short distance downstream from the junction of Wildcat Branch and Little Gunpowder) have exhibited good survival. If a source of brown trout fingerlings becomes available in the near future, it is proposed to stock that area regularly in an attempt to develop a self-sustaining population.

It is possible that Wildcat Branch does not have salmonids in it as a result of highway-and nearby development-derived pollution.

Fisheries will plan to recommend that relocation of Wildcat Branch, if necessary, be accompanied by a commitment by State Highway Administration to mitigate by rehabilitating the physical habitat to a condition that will support salmonids. This will involve techniques such as jack dams, gabions placed so as to provide overhead cover, alteration of stream invert gradient so as to provide varying velocities, streamside vegetation, boulder placement for fish cover and habitat variability, suitable bank armoring, overdigs to provide depth, check dams, and flow-directing structures.

We will anticipate working with State Highways design engineers and their consultants in order to produce a workable plan for the rehabilitation of such reaches of stream as may have to be altered, much as we are doing with regard to rehabilitation of streams impacted by U.S. 48 in Allegany County.

Thank you for the opportunity to comment on this project. We look forward to productive inter-agency cooperation. Please do not hesitate to call us as project planning goes forward.

Sincerely,

 W.R. Carter, NI
 Chief,
 Environmental Review

BUREAU OF
FISH AND
WILDLIFE
INVESTIGATION
NOV 10 12 27 PM '86

Stream: Rocky Branch

County: Hartford

Basin: Gunpowder

Station above bridge at Rt 1 Nov 23, 1981 @ 1000 hrs

Air temperature 30 F
Water condition clear
Gradient moderate
pH 7.5
Total hardness 68.8 mg/l
Alkalinity 51.0 mg/l

| | | | |
|----------------|--------------------|----------------|--------------------|
| Blacknose dace | common | Creek chub | common |
| Rosyside dace | scarce | Common shiner | scarce |
| White sucker | common | Fantail darter | common |
| Green sunfish | one | American eel | scarce |
| Ephemeroptera | common to abundant | Plecoptera | common to abundant |
| Trichoptera | scarce to common | Odonata | scarce |
| Diptera | scarce | Megaloptera | scarce |
| Coleoptera | common | | |

insect collection looks very good - good diversity with good numbers of stone and may flies, bottom covered with greenish-brown algae (crusty slime) in the quiet pools

Stream: Wildcat Branch

County: Hartford

Basin: Gunpowder F-30-80

Station US Rt 1 Aug 13, 1981 @ 1130 hrs

Average width 3.5 ft Average depth 4 in
Water temperature 69 F
Air temperature 79 F
Water condition clear
Gradient low
pH 7.0
Total hardness 52 mg/l
Alkalinity 34 mg/l

| | | | |
|----------------|------------------|--------------------|------------------|
| Blacknose dace | common | Longnose dace | scarce |
| Creek chub | scarce | Rosyside dace | scarce to common |
| White sucker | scarce | Tessellated darter | scarce |
| American eel | scarce to common | | |

Stream: Wildcat Branch

County: Hartford

Basin: Gunpowder F-30-80

Station Wilgis Rd Nov 23, 1981 1100 hrs

Air temperature 30 F
Water condition grayish tint
Gradient moderate
pH 7.0
Total hardness 80 mg/l
Alkalinity 51.6 mg/l

many cans and junk in water

Station Reckord Rd above bridge Nov 23, 1981 @ 1200 hrs

Air temperature 30 F
Water condition clear
Gradient moderate
pH 8.0
Total hardness 80 mg/l
Alkalinity 51.0 mg/l

| | | | |
|----------------|------------------|--------------|------------------|
| Blacknose dace | scarce to common | Creek chub | scarce to common |
| Rosyside dace | common | White sucker | scarce to common |
| Fantail darter | scarce to common | American eel | scarce |



United States Department of the Interior

BUREAU OF PROJECT PLANNING

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

JAN 3 9 23 AM '86

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December 30, 1985

Ms. Cynthia D. Simpson
Environmental Management
Maryland Dept. of Transportation
P.O. Box 717
707 N. Calvert Street
Baltimore, MD 21203

Dear Ms. Simpson:

This responds to your December 16, 1985 request for information on the presence of Federally listed endangered or threatened species within the area of AW-826-105 N, the proposed widening of US 1 from Silver Spring Road to Gunpowder Falls State Park. We have reviewed the information you enclosed and are providing the following information in accordance with the Endangered Species Act, as amended.

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 Judy Jacobs of our Endangered Species staff at (301) 269-6324.

Sincerely yours,

Glenn A. Kinser

Glenn Kinser
Supervisor
Annapolis Field Office

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BUREAU OF
PROJECT PLANNING

JAN 23 8 00 AM '86

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

January 13, 1986

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

Subject: Widening of U.S. Route 1, from Silver Spring
Road to Gunpowder Falls State Park

Dear Mr. Ege:

The Maryland Natural Heritage Program has no record of any rare species, unique habitat or other significant natural feature at, or in the vicinity of this project site. However, in the absence of a recent site review, we cannot show that such species or features are not present.

Species and habitats of special concern to the State are listed and discussed in the following 1984 Department of Natural Resources publication: Threatened and Endangered Plants and Animals of Maryland, available through this office. A site evaluation should include a consideration of these species and their habitats.

Sincerely,

Arnold W. Norden

Arnold W. Norden
Maryland Natural Heritage Program

AWN:mcs

VII.A-5

TELEPHONE: 269-3656

TTY FOR DEAF-BALTIMORE 269-2609. WASHINGTON METRO 565-0450

PROJECT PLANNING

MAR 13 9 58 AM



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TORREY C. BROWN, M.D.
SECRETARY

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

DONALD E. MACLAUCHLAN
DIRECTOR

March 6, 1986

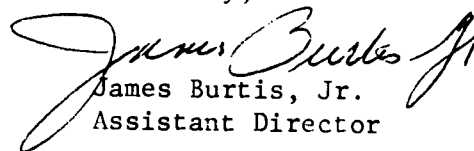
Ms. Cynthia D. Simpson, Chief
Environmental Management
Department of Transportation
P.O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: AW 826-105 N.
US Route 1 from Silver
Spring Road to
Gunpowder Falls State
Park

Dear Ms. Simpson:

Request for information on the above subject was received in February. The letter is dated December 16, 1985. Subject has been reviewed concerning threatened or endangered species, there are no known populations within the area of project influence in Baltimore County.

Sincerely,


James Burtis, Jr.
Assistant Director

JB:emp

cc: C. Brunori
G. Taylor

VII.A-6

240:



March 3, 1987

PROJECT
DEVELOPMENT
DIVISION
MAR 9 10 09 AM '87

Maryland Historical Trust

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

Re: Contract No. B 813-101-471
U.S. Route 1 from Silver
Road to Maryland Route 152
Baltimore and Harford Counties
PDMS No. 032115

Dear Ms. Simpson:

Thank you for your letter of October 28, 1986 concerning the above referenced project, we apologise for the delayed response.

Our office concurs with the following evaluations:

1. Frame Dwelling - MI
2. Frame Dwelling - MI
3. Frame Dwellings - MI
5. Dietz's Nursery (BA 2308) - MI
6. Heathcote (BA 238) - PNRE
8. Gorsuch-Wilson (BA 2303) - PNRE
9. Grupy Hollow (BA 240) - MI
10. Day-Deans-King (BA 243) - PNRE
13. St. John's (BA 132) - PNRE
14. Fluharty's Folly (BA 244) - MI
15. St. Paul's Church (BA 1182) - PNRE
16. Frame Dwelling - MI
17. Frame Dwelling - MI
18. Frame Dwelling - MI

We disagree, however, with your evaluations of #12 the Freedman's Bureau (BA 239), which based on available information (see enclosure) appears to be National Register eligible.

We feel that we do not possess enough information to make informed judgements on the following properties:

4. Baltimore Embroidery (BA 907)
7. Quinlan School (BA 2309)
11. Jailhouse (BA 2310)

VII.A-7

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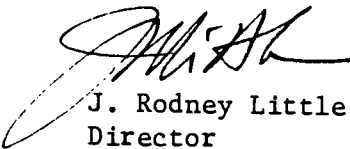
Ms. Cynthia Simpson
March 3, 1987
Page 2

19. Bagley Tenant House

Please provide us with any further data which may have been gathered during your historical research. We look forward to your response.

If you have any questions or comments feel free to contact Al Luckenbach at 974-4450.

Sincerely,



J. Rodney Little
Director

JRL:AHl:lcb

cc: Ms. Rita Suffness
Mr. Paul Wettlaufer
Ms. May C. Robinson
Mr. Paul McKean
Mrs. Jane M. Foard
Mr. Charles Keenan

Note: Attached are the descriptions for sites 7, 12 and 19 which were provided to the MHT on July 1, 1987. In that letter, we indicated that site 11, the jailhouse, was no longer extant.

4. Baltimore Embroidery Company (BA 907). 9621 Belair Road, Perry Hall. This long, one story brick building with a sheet metal roof was opened in 1915 as an embroidery factory, which is still in operation.
7. Quinlin Schoolhouse (BA 2309). Belair Road north of Mt. Vista Road. Probably built in the 1890's and in operation until 1906, this school has been greatly altered with the addition of undesirable porchs, dormers, new windows, and vinyl siding. In that there are many of the roughly 150 schoolhouses built before the 1920's consolidation which remain intact, the Quinlin School, which lacks integrity, is considered inventory level only, and not eligible for the National Register.
12. Freedman's Bureau (BA 239). This building has been erroneously associated with the Freedman's Bureau because an 1880's owner was named Freeman. The site was never publicly owned, let alone owned by the Freedman's Bureau, thus it has never been included in any of the documents or histories relating to this institution. It is considered inventory level only.
19. Bagley Tenant House, east side of Belair Road. This two part stone house is comprised of a possibly early 19th century, three bay portion on the south, and its identical twin, which was built onto the north side in 1950 to replace a collapsed frame addition. The original stone house was completely gutted in 1950, as it was condemned as unfit for human habitation after having been used as a tenant house for many decades. One of the few periods of Bagley occupany occurred after this extensive renovation.

The Bagley's operated a nursery for a 19th century nursery business located at the intersection of Maryland Routes 152 and 147. They mostly lived and worked in places other than the farm of which the tenant house was a part; namely, the Sunnybrook area of Baltimore County, Baltimore City, and the Eastern Shore of Maryland. There are no other early buildings on the Bagley farm apart from the tenant house.

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William Donald Schaefer
Governor

Jacqueline H. Rogers
Secretary, DHCD

NOV 20 2 31 PM '87
PROJECT DEVELOPMENT DIVISION

MARYLAND HISTORICAL



TRUST

November 6, 1987

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

RE: Contract No. B 813-101-471
U.S. Route 1 from Silver Spring Rd.
to Maryland Route 152
PDMS No. 032115

Dear Ms. Simpson:

Thank you for your letter of October 26, 1987 concerning the above-referenced project and the attached maps showing proposed boundaries for six NR-eligible sites. Our office concurs with these boundaries.

Sincerely,

George J. Andrevé
Project Review and Compliance
Administrator
Office of Preservation Services

GJA/AHL/jja

cc: Mr. Paul Wettlaufer
Ms. Rita Suffness
Ms. May C. Robinson
Mr. Paul McKean

Note: In the October 26, 1987 letter to MHT, SHA agreed that the Baltimore Embroidery Company was eligible for listing in the National Register and submitted a boundary coterminus with the tax parcel. Additionally, boundaries for Heathcote, the Gorsuch-Wilson House, Days-Dean-King House, St. John's Church, and St. Paul's Church were submitted. This letter from MHT concurs with the proposed boundaries.

Department of Housing and Community Development
Shaw House, 21 State Circle, Annapolis, Maryland 21401 (301) 974-4450, 757-9000
Temporary Address: Arnold Village Professional Center, 1517 Ritchie Highway, Arnold, Maryland 21012

244



Maryland Department of Natural Resources

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218
Telephone: (301) 554-5500

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Kenneth N. Weaver
Director

Emery T. Cleaves
Deputy Director

Division of Archeology
(301) 554-5530

13 November 1987

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

RE: Contract No. B 813-101-471
U.S. Route 1 from Silver Spring Road
to Maryland Route 152
PDMS No. 032115

Dear Mr. Ege:

As per your request of 3 November 1987, we have reviewed the above-referenced project with regard to archeological resources. Examination of the State Site File indicates that there are two large prehistoric archeological sites within 200 m of the project right-of-way — 18BA8 and W. B. Mayre Site 2 (approximately located and not assigned a state site number). In addition to two known prehistoric sites, the proposed project right-of-way crosses a number of small or intermittent streams and one large stream, Gunpowder Falls. Review of historic maps indicates the presence of an eighteenth century roadway, the Bel Air Turnpike, conforming to the location of current U.S. 1 in the project area. Eighteenth and nineteenth century structures have also been identified on historic maps in or adjacent to the proposed project right-of-way. For these reasons, the proposed project area is expected to have a high potential for preserved historic and prehistoric cultural resources. Given your conditional directive to proceed to conduct a Phase I survey if the potential for archeological resources is moderate or high, we will schedule a Phase I survey as soon as possible.

If we can be of further assistance in this matter, do not hesitate to contact me.

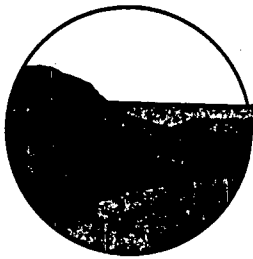
Sincerely,

Ira Beckerman
Highway Project Director

DNR ITTY for Deaf: 301-974-3683

VII.A-11

IB:lw



Maryland Department of Natural Resources

Capital Programs Administration
2012 Industrial Drive
Annapolis, Maryland 21401

245

PROJECT DEVELOPMENT DIVISION
JAN 25 11 01 AM '88

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Michael J. Nelson
Assistant Secretary
for Capital Programs

January 19, 1988

Ms. Cynthia D. Simpson, Chief
Environmental Management
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21203-0719

Re: Contract No. B 818-204-471
US Route 1 Bridge No. 3175
over the Big Gunpowder Falls
and Associated Approach Road
Improvements at Gunpowder
Falls State Park

Dear Ms. Simpson:

The Capital Programs Administration has reviewed the above referenced project to determine the type of funding used to purchase properties in Gunpowder Falls State Park that will be impacted by the proposed improvements to U.S. Route 1.

The following list of properties located along the U.S. Route 1 corridor will be impacted by the proposed improvements. These properties were purchased with State funds. Federal Land and Water Conservation Funds were not used, therefore the Federal 6 (f) land conversion process will not apply. We request that Program Open Space guidelines be used for replacing the impacted park property on this project.

PROPERTY LOCATED ALONG U.S. ROUTE 1 AT BIG GUNPOWDER FALLS

GUNPOWDER FALLS STATE PARK REFERENCE LIST SHEET 10

Table with 3 columns: Parcel #, Name, Acquisition Date. Rows include Mamie Mahr (8/04/61) and Christian W. Laubach (12/28/64).

Telephone:
DNR TTY for Deaf: 301-974-3683

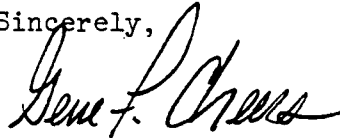
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Simpson, Cynthia D.
January 19, 1988
Page 2

| <u>Parcel #</u> | | <u>Acquisition Date</u> |
|-----------------|-----------------------|-------------------------|
| 421 | Robert C. Burton, Sr. | 12/02/66 |
| 423 | Robert W. Furn Kas | 6/07/71 |
| 412 | William D. Meise | 9/08/78 |
| 409 | John J. Pratt | 4/19/61 |

If you have any questions, please contact me at 974-3656.

Sincerely,



Gene F. Cheers
Chief, Capital Improvements
Planning & Environmental
Review

GFC:mls

cc: Bill Krebs

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DEPARTMENT OF THE ENVIRONMENT

201 WEST PRESTON STREET • BALTIMORE, MARYLAND 21201
AREA CODE 301 • 225- 5275

William Donald Schaefer
Governor

Martin W. Walsh, Jr.
Secretary

July 13, 1988

Ms. Cynthia D. Simpson, Chief
Environmental Management
Project Development Division
707 North Calvert Street, Room 310
Baltimore, Maryland 21202

RE: Reconstruction of U.S. Route 1
from Silver Spring Road to
Maryland Route 152
Contract No. B 813-101-471

Dear Ms. Simpson:

I have reviewed the air impact analysis performed for the proposed reconstruction of U.S. Route 1 (Belair Road) from Silver Spring Road in Baltimore County to Route 152 in Harford County and concur with its conclusions.

The proposed project is consistent with the transportation control portion of the State Implementation Plan for the Metropolitan Baltimore Intrastate Air Quality Control Region. Furthermore, adherence with the provisions of COMAR 10.18.06.03D will ensure that the impact from the construction phase of this project will be minimal.

Thank you for the opportunity to review this analysis.

Sincerely,

Mario E. Jorquera, Chief
Division of Air Quality Planning and
Data Systems
Air Management Administration

MEJ/zbs

Baltimore County
Department of Recreation & Parks
Towson, Maryland 21204
494-3817
494-3058 (Deaf/TDD)

Robert R. Staab
Director

August 5, 1988



Dennis F. Rasmussen
County Executive

Mr. David L. Manly
Senior Associate
Kidde Consultants, Inc.
1020 Cromwell Bridge Road
Baltimore, MD. 21204

Dear Mr. Manly:

I was forwarded your letter of July 26 concerning our department's use of Lassahn's Field near U.S. Route 1 in the Perry Hall/Kingsville area.

In response to your inquiry, we would like to indicate that we no longer hold a lease agreement with the owner for any portion of the property. The lease that we did have was terminated on May 31, 1988 due to the owner's planned sale of the site.

Sincerely,

Handwritten signature of Robert J. Knoerlein in cursive.
Robert J. Knoerlein
Northeast Area Superintendent

RJK/mcb

cc: Mr. Charles L. Fisher

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PROJECT DEVELOPMENT DIVISION

SEP 6 10 00 PM '88

William Donald Schaefer
Governor

Jacqueline H. Rogers
Secretary, DHCD

August 24, 1988

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

Re: Contract No. B813-101-471
U.S. Route 1 from
Silver Spring Road to
Maryland Route 152
PDMS No. 032115

Dear Ms. Simpson:

Thank you for your letter of February 3, 1988 concerning the above referenced project and specifically your boundary request for the Days-Dean-King House.

This office has determined that the proposed boundary would have an adverse effect on this property. Even though the original Route 1 roadbed was closer to the house, the volume and type of traffic was very different from that which will be using the road today. We feel the resultant ground vibrations that close to the house could and probably would undermine the structural integrity of this stone structure.

We would suggest that the road come no closer to the house than the State Highway Administration's current easement limits.

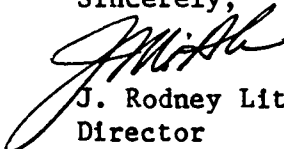
Maryland

Department of Housing and Community Development
Shaw House, 21 State Circle, Annapolis, Maryland 21401 (301) 974-4450, 757-9000
Temporary Address: Arnold Village Professional Center, 1517 Ritchie Highway, Arnold, Maryland 21012

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Ms. Cynthia Simpson, Chief
August 24, 1988
page 2

Should you have any questions, please do not hesitate to call Michael Day at 974-5000.

Sincerely,

J. Rodney Little
Director

JRL/MKD/meh

- cc: Ms. Rita Suffness
- Mr. Paul Wettlaufer
- Mr. Don Klima
- Ms. Sallie Van Rensselaer
- Mr. Charles Montgomery

MARYLAND
HISTORICAL



TRUST

PROJECT
DEVELOPMENT
DIVISION

SEP 19 10 31 AM '88

251
William Donald Schaefer
Governor

Jacqueline H. Rogers
Secretary, DHCD

September 1, 1988

Mr. Louis H. Ege, Jr.
Deputy Director
Division of Project Development
State Highway Administration
P. O. Box 7171
North Calvert Street
Baltimore, Maryland 21201

Re: Phase I Archeological
Reconnaissance
Contract No. B 813-101-471
U.S. Route 1, Silver Spring
Road to MD Route 152
PDMS No. 032115
Baltimore and Harford
Counties, Maryland

Dear Mr. Ege:

Thank you for sending us a copy of the executive summary of the Phase I Archeological Survey conducted of the above referenced project. The summary was prepared by the Maryland Geological Survey and is dated July 1, 1988. This office received its review copy from the State Highway Administration on August 2, 1988.

The executive summary presents a concise documentation of the goals, methodology, results and recommendations of the survey. The survey identified and recorded nine sites (two prehistoric, five historic and two mixed prehistoric/historic) and eight artifact scatters (five prehistoric and three historic). Based upon data presented in the executive summary, this office concurs that the following sites and artifact scatters are not eligible for inclusion on the National Register of Historic Places: 18BA335, 18BA336, 18BA337, 18BA338, 18BA339, 18BA340, 18BA341, 18HA173, 18BAX203, 18BAX204, 18BAX205, 18BAX206, 18BAX207, 18BAX208 and 18HAX20. Sites 18BA336 and 18BA341 as well as artifact scatters 18BAX206 and 18BAX207 have compromised integrity due to later grading and/or construction. Sites 18HA173, 18BA339, 18BA340 and artifact scatter 18HAX20 have been dated to the mid-20th century on the basis of documentary evidence and artifacts recovered. The four other artifact scatters 18BAX203, 18BAX204, 18BAX205, and 18BAX208 are not likely to yield additional important information regarding the history or prehistory of the areas under consideration. This office does not recommend additional archeological research of these sites or scatters.

Maryland

Department of Housing and Community Development
Shaw House, 21 State Circle, Annapolis, Maryland 21401 (301) 974-5000

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The mixed historic/prehistoric site 18BA334 may be eligible for listing on the National Register of Historic Places. The prehistoric component contains a variety of artifact types, including five broken bifaces, three cores and considerable debitage indicative of lithic reduction and may represent a seasonal base camp. Site 18BA334 may yield information regarding site function, regional settlement patterns and prehistoric technology important to an understanding of the prehistory of the region. If an alternate alignment is selected that may impact this site, Phase II archeological testing will be necessary to assess its eligibility for the National Register.

Artifact scatter 18HAX202 may represent activities related to a nineteenth century tanyard. Limited subsurface testing revealed a distinct, charcoal-bearing organic layer which may represent residue from the tanning process. However, no historic artifacts relating to the appropriate period were recovered from this area. Insufficient information is available at this time to permit an assessment of the location's eligibility for the National Register. If an alternate alignment is chosen that may impact this artifact scatter, Phase II archeological testing will be necessary to provide a better assessment of its eligibility for the National Register.

We would like to take this opportunity to express our concern that historic archeological resources associated with standing structures will be considered in developing future sampling strategies. We note that archeological resources which are potentially eligible for the National Register may exist in association with historic standing structures which are themselves determined not to be eligible because alterations to those structures have compromised their integrity. The above referenced executive summary refers to fifteen extant structures which appear on historic atlases. It would be helpful to the reviewer to have the locations of these structures indicated on the project maps, along with the Maryland Structures Inventory Number, if one has been assigned.

We also have some concern with the use of the term "artifact scatter". Clarification of the distinction drawn between "site" and "artifact scatter" would be helpful. It is, for example, confusing to find a very low-density debitage scatter with 5 flakes recovered from 4 to 12 STPs described as a "site" (Site 18BA336, page 3), while a small scatter of prehistoric material with 4 flakes found in 3 of 6 STPs is described as an "artifact scatter" (18BAX206, page 5). In both areas small quantities of historic material were also found. Both areas were disturbed by grading or later construction.

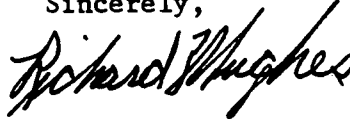
We request that some consideration be given to addressing our two concerns outlined above in order to facilitate timely review of future executive summaries. We appreciate the efforts of the Project Archeologist for the above referenced project to present a lengthy and complex reconnaissance in a clear and concise manner. In particular, we note that the figures attached to this executive summary provide very helpful documentation of the project's level of effect.

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If you have any questions or require additional information, please contact (Dr.) Ethel R. Eaton of my staff (301) 974-5000. We look forward to receiving a copy of the final report, when it is available.

Thank you for your continued cooperation and support.

Sincerely,



Richard B. Hughes
Chief Administrator
Archeological Programs
Office of Management and Planning

RBH:ERE:lcb

cc: Ms. Cynthia Simpson
Mr. Tyler Bastian
Mr. Richard Erwin
Mrs. Lauri Fitzgerald
Mr. Paul McKean
Ms. Sallie Van Rensselaer
Mr. Charles Montgomery

MARYLAND
HISTORICAL



TRUST

PROJECT
DEVELOPMENT
DIVISION

SEP 16 9 47 AM '88

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William Donald Schaefer
Governor

Jacqueline H. Rogers
Secretary, DHCD

September 13, 1988

Ms. Cynthia D. Simpson, Chief
Environmental Management
Maryland Department of Transportation
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21203-0717

Re: Contract No. B 813-101-471
US 1 from Silver Spring Road
to MD 152
PDMS No. 032115

Dear Ms. Simpson:

This office has reviewed the material submitted for the above reference project and is in concurrence with your determinations of effect as follows:

| | Four-Lane Alternate | Six-Lane Alternate | Option B | Option E | Option P* |
|--|------------------------|-----------------------|-------------|-------------|--------------|
| Baltimore Embroidery Company | N.A.E. | N.A.E. | - | - | - |
| Heathcote | N.E. | N.E. | - | - | - |
| Gorsuch- Wilson House | N.E. | N.E. | - | - | - |
| Days-Dean- King House (Funeral Home) | N.E. | N.E. | N.E. | N.E. | N.A.E. |
| St. Johns Church | N.A.E. | N.A.E. | N.A.E. | N.A.E. | N.A.E. |
| St. Pauls | N.E. | N.E. | N.E. | N.E. | N.E. |

N.E = No Effect
N.A.E. = No Adverse Effect

* Note: Option F was inadvertently written as Option P by M.H.T.

Maryland

Department of Housing and Community Development
Shaw House, 21 State Circle, Annapolis, Maryland 21401 (301) 974-5000


Ms. Cynthia D. Simpson
September 13, 1988
Page 2

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If any of the above alternates and options are modified, please notify this office at once as it may have an effect on our current opinion.

Should you have any questions, please contact Michael Day at 974-5000.

Sincerely,


George J. Andreve
Project Review and
Compliance Administrator
Office of Preservation Services

GJA:MKD:lcb

cc: Ms. Rita Suffness
Ms. Sallie Van Rensselaer
Mr. Charles Montgomery
Mr. Christopher Weeks
Mr. John McGrain
Mrs. Lauri Fitzgerald
Mr. Paul McKean

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

841 Chestnut Building
Philadelphia, Pennsylvania 19107

SEP 28 1988

Ms. Cynthia D. Simpson, Chief
Environmental Management
State Highway Administration
Project Development Division (Room 310)
707 North Calvert Street
Baltimore, Maryland 21202

Re: U.S. Route 1 from Silver Spring Road to
to Maryland Route 152 (88-06-731)

Dear Ms. Simpson:

In accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, EPA has reviewed the Draft Air Quality Analysis for the above referenced project. We are satisfied with the approach and the assumptions used for analyzing the potential air quality impacts of the proposed project. The results of the analysis indicate that the project will not violate the National Ambient Air Quality Standards (NAAQS). Therefore, we do not object to this project on the basis of air quality impacts.

For future reference, additional analysis should be conducted in closer proximity to major intersections because the highest concentrations of pollutants occur in these areas. In order to do this, CALINE 3 could be used in combination with Worksheet #2 of Volume 9 of the Air Quality Maintenance Planning and Analysis Series (EPA-450/4-78-001).

Thank you for including EPA in the early coordination of this report. Should you have any questions, or if we can be of further assistance, please contact Lynn Rothman or Larry Budney at 215-597-7336 or 215-597-0545 respectively.

Sincerely,

Jeffrey M. Alper, Chief
NEPA Compliance Section

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Maryland Department of Natural Resources

PROJECT DEVELOPMENT DIVISION

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218
Telephone: (301) 554-5500

MAR 11 10 20 AM '88

William Donald Schaeter
Governor

Torrey C. Brown, M.D.
Secretary

Kenneth N. Weaver
Director

Emery T. Cleaves
Deputy Director

Division of Archeology
(301) 554-5530

8 March 1988

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

RE: Contract No. B 813-101-471
U.S. Route 1 from Silver Spring Road
to Maryland Route 152
PDMS No. 032115
Baltimore and Harford Counties, Maryland

Dear Mr. Ege:

At the request of the State Highway Administration, the Division of Archeology conducted a Phase I survey of U.S. Route 1 between Silver Spring Road and Maryland Route 152, Baltimore and Harford Counties, Maryland (Contract No. B 813-101-471; Figures 1, 2, and 3). Construction proposals include four and six lane alternates with variable right-of-way widths. Both alternates follow the existing road, with widening on one or both shoulders. The right-of-way is about 14.5 km (9 miles) long, and the six lane alternate surveyed by archeologists is between 34 m (110 feet) and 84 m (275 feet) wide.

The survey was done between 14 December 1987 and 10 February 1988. Archeologist Richard Ervin, and field assistants Allison Coerper, Steven Gaber, Spencer Geasey, Alison Helms, William Huser, and Raymond Tubby participated in the fieldwork. The survey area forms a transect across moderately rolling Piedmont upland topography. Numerous small streams and two major drainages, Gunpowder Falls and Little Gunpowder Falls, cross the survey area. Three soil associations having silty clay loam subsoils occur: piedmont types Montalto-Neshaminy-Aldino and Legore-Aldino-Neshaminy, and coastal plain type Beltsville-Chillum-Sassafras.

Parts of the survey area had been disturbed by development, especially in Perry Hall and Kingsville. The remaining areas were relatively undisturbed agricultural or wooded land.

A stratified sampling strategy was used to test for prehistoric sites. The survey area was first classified by topography and present land use. Five categories were defined: high probability areas (level, well-drained terraces under 4% grade, within 50 m of water); medium probability areas (level hill and ridgetops under 4% grade, more than 50 m from water); low probability areas (undisturbed areas under 15% grade, not meeting the criteria summarized above); steep slopes (greater than 15% grade); and disturbed land (developed areas with intensive ground disturbance). Disturbed land and steep slopes were not tested, although slopes were checked for rockshelters. Where surface visibility was low, shovel test pits were excavated at 20 m intervals in high probability areas. A 30 m interval was employed in all medium probability areas, and a 15% sample of low probability areas was also tested at 30 m intervals. Plowed fields were inspected visually along parallel transects at 15 m intervals.

The historic site testing plan was based on information from Sidney's map of Baltimore County (1850), Jennings and Herricks map of Harford County (1858), Hopkins' Atlas of Baltimore County (1877), and Martenet's map of Harford County (1878). The maps showed 47 structures within the right-of-way. Of 17 structures outside disturbed land, which was not tested, 15 are extant. The locations of the two non-extant structures were tested by four shovel test pits. One structure foundation was located, and several other sites were found when structural features not on historic maps were encountered.

Shovel test pits were 50 cm in diameter and excavated to 75 cm, or to clay subsoil indicative of Pleistocene soil development. Excavated material was screened through 1/4 inch mesh hardware cloth.

Survey Results

Two mostly prehistoric sites, five mostly historic sites, and two mixed prehistoric/historic site were found. Of these, two prehistoric sites, five historic sites and one mixed site are within the right-of-way. Five prehistoric and three historic artifact scatters were also found. Two of the prehistoric scatters and one of the historic scatters are within the right-of-way.

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Situated on a hillslope next to a first-order stream, 18BA334 (Figure 4) is a large (180 m by 50 m), medium-density prehistoric and historic site outside the the right-of-way. A sparse scatter of twentieth century artifacts was found adjacent to the right-of-way. A low-density scatter of nineteenth and twentieth century domestic artifacts (porcelain, whiteware ceramics, bottle glass, and small quantities of window glass and brick fragments) extended north from the right-of-way (Areas 1 and 2). A moderate-density scatter of prehistoric artifacts was found on the stream bank and adjacent hillslope 80 m north of the right-of-way (Area 3). A stemmed projectile point, 5 biface fragments, 3 cores, and over 50 pieces of quartz and chert debitage were recovered. The quartz projectile point is a late Archaic Bare Island point, dating between 2500 and 1900 B.C. (Gleach 1987).

18BA335 (Figure 5) is a medium size (30 m by 100 m), very low-density prehistoric site with a minor historic component. The site is on an open, wooded hill overlooking two stream headwaters, and is partly within the right-of-way. A quartz stemmed projectile point fragment, 12 quartz flakes and 1 rhyolite flake were found in 4 of 12 shovel test pits. Small quantities of historic artifacts were also recovered. Soil profiles showed the area had been plowed.

Situated on a ridgetop 250 m from a first order stream headwater, 18BA336 (Figure 6) is a medium size (45 m by 60 m), very low-density debitage scatter. Five flakes were recovered from 4 of 12 shovel test pits, and small quantities of historic material were also found. Most of the test pit profiles showed disturbance in which the topsoil had been removed and the subsoil compacted. The area appears to have been graded by heavy equipment.

18BA337 (Figure 7) is a medium size (45 m by 60 m), very low-density prehistoric site on a hilltop. The site is partly within the right-of-way. Eighteen flakes were found in seven of seventeen shovel test pits, and small quantities of historic artifacts were also found. The property owner displayed three projectile points reportedly found 100 m (305 feet) east of the shovel test pits. Two are quartz side-notched or stemmed point fragments, while the third is a gray chert side-notched point with a concave base.

Located along a pre-1934 alignment of Belair Road, 18BA338 (30 m by 40 m) is an historic structure foundation (Feature 1) and associated deposits (Figure 8). According to the landowner, an original log structure was built in the mid-nineteenth century by an ancestor named Firncase. This log cabin is represented by the foundation's older section, constructed of mortared fieldstones; the newer section is a poured-concrete slab. The feature is covered by structural debris, including log beams, milled lumber, pipes, and plumbing fixtures. The landowner reports the structure was inhabited until shortly before it was torn down some five years ago. Four shovel test pits produced numerous historic artifacts. Diagnostic pieces include several mid-twentieth century beverage bottle fragments, one piece of manganese-tinted glass, cut nails, wire nails, and plastic fragments. Although some artifacts

are from the late nineteenth or early twentieth centuries, others date to the mid-twentieth century. An expanding stem projectile point fragment had been found by the landowner in a plowed garden near the foundation.

18BA339 (30 m by 75 m) is an historic feature complex located within the right-of-way on the south bank of the Little Gunpowder River (Figure 9). The site includes a mortared stone foundation (Feature 1) with a poured concrete addition (Feature 2), and several other poured concrete features. Seven shovel test pits produced material dating no earlier than the late nineteenth century, including asphalt shingles, wire nails, and crown bottle caps. Feature 1 reportedly represents a restaurant and tavern that catered to travellers along the Bel Air turnpike. Because the tavern is not shown on the 1901 USGS 15' Gunpowder quadrangle, it may date to the twentieth century.

Historic site 18BA340 (20 m x 30 m), located within the right-of-way on the floodplain of a first-order stream, reportedly represents the remains of a recently-demolished stone structure (Figure 10). Three of four shovel test pits produced considerable structural debris (fragments of bricks, asphalt tiles and slate shingles) along with whiteware ceramics, milk glass, and other mid-twentieth century material.

Four mortared stone walls without a roof represent the ruins of a small (3 m by 4 m) springhouse, 18BA341 (Figure 11). The springhouse is on the grounds of a stone structure designated the S.F. Bell residence on the 1878 Hopkins Atlas of Baltimore County. The area around 18BA341 was reportedly graded during construction of a nearby pond, a fact confirmed by two shovel test pits. At least 95 cm of fill containing mid-twentieth century objects capped the original land surface.

18HA173 consists of several historic features covering a large (60 m by 140 m) area of a steep hillslope (Figure 12). Outside the right-of-way are three poured concrete foundations of twentieth century construction. Within the right-of-way is a fourth foundation (Feature 3) built of dressed quartz blocks, with a cinder block addition. Quartz fragments found in an adjacent shovel test may be the by-product of shaping quartz blocks, and not prehistoric artifacts. A nearby depression (Feature 4) probably represents a well or privy hole. Seven shovel test pits produced ample twentieth century material such as bottle glass and wire nails.

18BAX202 is a very low-density scatter of historic artifacts on the floodplain of a first order stream. Sidney's (1850) map depicts a tanyard near this stream. The proposed right-of-way was tested by three shovel test pits at 20 m intervals on the stream's south bank (the north bank was covered by standing water at the time of the survey). However, only mid-twentieth century material was recovered. Based on the area's topography, observed cultural features, and information provided by the landowner, two areas outside the right-of-way were identified as possible sites of the tannery. The most likely spot is 240 m (800 feet) west of the right-of-way, upstream of two earthen berms. An unimproved roadbed runs from Belair Road past this area to a crude stone bridge across the stream. Four shovel test pits produced

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evidence of cultural activity possibly associated with the tannery. Two test pits revealed a distinct, charcoal-bearing organic layer, which may represent residue from the tanning process; its thickness and the relative abundance of charcoal are not indicative of a natural forest fire. The test pits also yielded oyster shells, coal, a bottle glass fragment and two shotgun shells. Two additional shovel test pits were excavated next to a mortared brick water trough 350 m (1150 feet) west of the right-of-way. No material was encountered, aside from a single brick fragment.

Seven other artifact scatters, isolated features and isolated artifacts were recorded. 18BAX203 (Figure 14) is a low-density scatter of nineteenth and twentieth century artifacts from a plowed field. 18BAX204 (Figure 15) is a very low density scatter of 12 prehistoric and 23 historic artifacts from a plowed field. Prehistoric artifacts include a reworked bifurcate projectile point fragment, a point tip, a biface, and debitage. Historic material probably represents field scatter. 18BAX205 (Figure 1) is an isolated grooved axe fragment found in one of four shovel test pits. Two abandoned road alignments or utility trenches are nearby. 18BAX206 (Figure 16) is a small (75 m by 50 m) scatter of prehistoric and modern material found on undisturbed remnants of a first-order stream floodplain. Four flakes were found in three of six shovel test pits. Building construction and rechannelization have disturbed most of the area. Prehistoric and historic material from a bench overlooking a first order stream was designated 18BAX207 (Figure 17). Three flakes, historic ceramics and a kaolin pipe fragment were recovered from five shovel test pits. Building construction had disturbed parts of the area. 18BAX208 (Figure 18) consists of four flakes from one of six shovel test pits excavated near a first-order stream. 18BAX20 (Figure 19) is a cluster of mid-twentieth century features, including a swimming pool (Feature 4) and a mortared stone hearth (Feature 2).

Interpretations and Recommendations

18BA334 includes a moderate density scatter of prehistoric artifacts and low-density scatter of historic artifacts. Twentieth century material adjacent to the right-of-way is not considered potentially significant. Nineteenth and twentieth century artifacts outside the right-of-way probably represents field scatter and are not considered potentially significant. The prehistoric component contains a variety of artifact types, including five broken bifaces, three cores and considerable debitage indicative of lithic reduction. The abundance and variety of artifacts suggest the site represents a seasonal base camp. 18BA334 may yield information about site function and regional settlement patterns, and is thought to be a potentially significant cultural resource. It is recommended that the site be protected by fencing and that it be avoided during construction. If avoidance is not feasible further archeological work is recommended to assess the significance of 18BA334.

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Artifact scatter 18HAX202 may represent activities related to a nineteenth century tanyard. The material is 240 m west of the proposed construction right-of-way. It is expected that 18BAX202 can be avoided during proposed construction. If 18BAX26 can not be avoided, further archeological work may be warranted.

18BA335 is a low density prehistoric site partly within the right-of-way. The low-density and scattered distribution of prehistoric material suggest the site represents sporadic activity. It is not considered potentially significant as it is unlikely to yield important information. No further work is recommended at 18BA335.

18BA336 is also a low-density flaked stone scatter partly within the right-of-way. Disturbed soil profiles indicate the site has been graded. Because 18BA336 lacks integrity, it is not considered potentially significant. No further work is recommended.

18BA337 is another low-density scatter of flaked stone artifacts partly within the right-of-way. The low artifact density suggests limited activities. The site is not considered potentially significant as it is unlikely to yield important information. No further work is recommended at 18BA337.

18BA338 is an historic structure foundation partly within the right-of-way. The structure was built before 1887, but was occupied into the mid-twentieth century. Diagnostic material from shovel test pits dates from the late nineteenth to the mid-twentieth centuries. Because artifacts from different periods (including some material of recent origin) are mixed together, 18BA338 is unlikely to yield important information and is not considered potentially significant. No further work is recommended.

18BA339 is an historic feature complex partly within the right-of-way. None of the features appear on nineteenth century maps, and shovel test pits produced only twentieth century cultural material. Because of this, 18BA339 is unlikely to yield important information and is not considered potentially significant. No further work is recommended.

18BA340 is the site of a recently demolished historic structure partly within the right-of-way. Shovel test pits produced only twentieth century material. The site is not considered potentially significant because it is unlikely to yield important information. No further work is recommended.

18BA341 is a springhouse ruin within the right-of-way. Shovel test pits confirmed that the site area had been substantially altered by grading. Because the site lacks integrity, it is not considered potentially significant, and no further work is recommended.

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18HA173 is an historic feature complex partly within the right-of-way. Twentieth century construction and use of the features is indicated by building techniques and diagnostic artifacts. 18HA173 is not considered potentially significant because it is unlikely to yield important information and no further work is recommended.

18BAX203 is a low-density scatter of nineteenth and twentieth century material within the right-of-way. The material probably represents field scatter. 18BAX204 is a very low-density prehistoric and historic artifact scatter representing limited activities. 18BAX205 is an isolated artifact, a groove axe fragment, found within the right-of-way. By itself the artifact is not able to yield important information. 18BAX206 is a small scatter of flakes within the right-of-way. Construction has seriously damaged the integrity of the cultural remains. 18BAX207 is a small scatter of prehistoric and historic artifacts found just outside the right-of-way. 18BAX208 is a small group of flakes found outside the right-of-way. 18HAX20 is a complex of twentieth century recreational features outside the right-of-way. It is not considered likely to yield important information because of the recent origin and common nature of the features.

Scatters 18BAX203, 18BAX204, 18BAX205, 18BAX206, 18BAX207, 18BAX208, and 18HAX20 are not considered potentially significant resources as they are unlikely to yield information important in history or prehistory. No further work is recommended on these resources.

Prior to fieldwork, examination of the Maryland Archeological Site Survey files indicated a high probability of finding prehistoric sites near streams, and a medium probability of finding sites on hilltops. The survey results suggested sites are somewhat more likely to be found on hilltops (these sites are typically small, low-density flaked stone scatters). Cultural resources were found on five of eight tested hilltops but only five of eleven tested streams. Furthermore, five of nine prehistoric cultural resources (defined as the total of both sites and artifact scatters) and three of four prehistoric sites proper were found on hilltops. Clearly, hilltops were an important focus of activity within the study area. The small, low-density hilltop sites probably represent resource procurement activities. As originally expected, the largest site found in the survey area was near a stream.

Summary of Recommendations

Mixed prehistoric and historic site 18BA334 and historic artifact scatters 18BAX202 are considered potentially significant cultural resources because of the information they may contain important in history or prehistory. It is recommended that 18BA334 be fenced and avoided during construction, and that 18BAX202 be avoided during construction. If avoidance is not feasible, further archeological work may be required.

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Archeological sites 18BA335, 18BA336, 18BA337, 18BA338, 18BA339, 18BA340, 18BA341, and 18HA173; and artifact scatters 18BAX202, 18BAX203, 18BAX204, 18BAX205, 18BAX206, 18BAX207, 18BAX208 and 18HAX20 are not considered potentially significant cultural resources, and no further work is recommended for these sites.

If I can be of further assistance regarding this matter, please call me at 554-5537.

Sincerely,



Richard Ervin
Archeologist

RE:lw

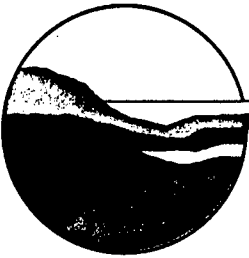
cc: Cynthia D. Simpson
Joseph Hopkins

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REFERENCES

- Gleach, Frederic W.
1987 A Working Projectile Point Classification for Central Virginia.
Archeological Society of Virginia Quarterly Bulletin 42(2):80-120.

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Maryland Department of Natural Resources

Capital Programs Administration
2012 Industrial Drive
Annapolis, Maryland 21401

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Michael J. Nelson
Assistant Secretary
for Capital Programs

April 10, 1989

Synthia D. Simpson, Chief
Environmental Management

Subject: Contract No. B 813-101-471
U. S. 1, Silver Spring Rd. to Md. 152
Little Gunpowder River Crossing.

Dear Ms. Simpson:

As a follow-up to your memorandum of March 10, 1989 concerning the field visit on February 24, 1989, I wish to add the following comments for clarification:

1. Item #2- Loss of the existing parking lot, even though it is located on SHA property, is an important issue. If a similar facility cannot be provided along the improved roadway, additional discussion with SHA will be necessary to find an alternative.
2. Item #3- It should be added that D.N.R. previously suggested that the SHA salt dome property be conveyed to DNR as replacement land.
3. Item #7- Our request was that SHA provide a bench under the bridge so that the existing hiking/equestrian trail could be maintained without crossing the new roadway at-grade. The roadway crossing would be too dangerous for us to propose seriously. Only if a crossing beneath the bridge were impossible, would DNR consent to continuing their trail across the road. In that instance, obviously, the guard rails on both sides of the highway would have to be broken. In addition, we would request special signing to warn motorists that a major hiking/equestrian crossing was ahead. It might also be necessary for rails to be installed in the grassed median to protect trail users while they wait to complete their crossing.

Telephone: _____

DNR TTY for Deaf: 301-974-3683

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Simpson, Synthia D.
April 10, 1989
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If you have any question, please contact me.

Sincerely,

Gene F. Cheers



Chief
Capital Improvements &
Environmental Review

GFC:sab

cc: Arnold Norden

Advisory Council On Historic Preservation

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The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

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| MEMO |
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APR 28 1989

Mr. A. P. Barrows
Division Administrator
Maryland Division, Region 3
Federal Highway Administration
The Rotunda, Suite 220
722 West 40th Street
Baltimore, MD 21211-2187

REF: Upgrading of US Route 1,
Baltimore/Harford Counties

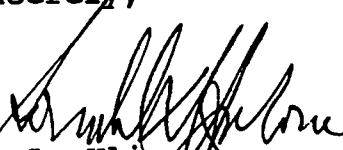
Dear Mr. Barrows:

On April 10, the Council received the additional information to supplement your previous request for comments on the referenced project. Based upon all the material provided, including the concurrence of the Maryland State Historic Preservation Officer, we concur in your determination of no adverse effect on the Baltimore Embroidery Company, the Days-Dean-King House, and St. Johns Church, properties eligible for listing in the National Register of Historic Places.

This letter confirms that the requirements of Section 106 of the National Historic Preservation Act and the Council's regulations have been met for this project. Both this letter and your supporting documentation should be retained in your environmental or project files.

Thank you for your cooperation.

Sincerely,


Don L. Klima
Director, Eastern Office
of Project Review

VII.B. PUBLIC PARTICIPATION SUMMARY

PUBLIC PARTICIPATION SUMMARY

Alternates Public Meetings were held for the U.S. Route 1 project at two locations in the study corridor.

The first meeting was held on Tuesday, April 28 at Perry Hall Senior High School on Ebenezer Road. An opportunity for the public to view the project displays was provided at 6:30 p.m. with the meeting beginning at 7:30 p.m. Approximately 300 persons attended the meeting.

Several persons testified that other parallel facilities such as Harford Road, Maryland Route 7 or the once proposed extension of Perring Parkway should be considered for construction rather than U.S. Route 1. Others feared that the proposed improvements to U.S. Route 1 would generate more traffic and development. Several business owners protested the taking of businesses for the project.

The second meeting was held on Thursday, April 30 at Fallston Senior High. Approximately 100 persons attended that meeting.

Many of the comments received at this meeting were from residents of Kingsville concerned about impacts to their community.

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PUBLIC HEARING COMMENTS

A Combined Location and Design Public Hearing was held for this project on Thursday, December 8, 1988 at Perry Hall Senior High School in Baltimore County. Mr. C. Robert Olsen, District Engineer for District 4, State Highway Administration, presided over the hearing. Representatives of SHA's Project Development Division described the study process and the alternatives under consideration and presented an environmental overview of the project. SHA also explained the right-of-way acquisition process and the relocation assistance program. Persons attending the hearing were provided a copy of the U.S. Route 1 Combined Location/Design Public Hearing Brochure, which summarized features of the alternates. The Draft Environmental Impact Statement and a public information display were available for review prior to and at the hearing.

Official transcripts were prepared of the Location/Design Public Hearing. The hearing record contains the testimony of 29 speakers and 6 other persons who provided independent testimony. Written statements were received from 20 individuals. Copies of the transcripts are available for review at the Maryland State Highway Administration.

SUMMARY OF PUBLIC HEARING TESTIMONY

- 1. Senator Thomas Bromwell - Maryland Senator, District 8 - Perry Hall

Comment:

The No Build should not be considered. The first phase of construction should stop at Pinedale Drive. North of Pinedale Drive, a six-lane roadway is not needed.

Response:

The extension of the Six-Lane Alternate north of Pinedale Drive will be constructed on an as-needed basis, in consultation with local officials.

- 2. Delegate Walter Burgess - Maryland Delegate, District 8 - Perry Hall

Comment:

Residential development is exploding in U.S. Route 1 corridor. Will the availability of additional access point help control development in the corridor?

Response:

Growth and zoning are issues controlled by the local subdivisions. The selected alternate will help control future access by providing a median.

- 3. Joseph Bartenfelder - Maryland Delegate, District 8 - Perry Hall

Comment:

Delegate Bartenfelder endorsed the Six-Lane Alternate up to Pinedale Drive.

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Response:

The Six-Lane Alternate has been selected. North of Pinedale Drive, six lanes will be constructed in consultation with local officials as needed.

- 4. Donna Felling - Maryland Delegate, District 8 - Perry Hall

Comment:

The Citizens Advisory Committee worked to ensure safety along U.S. Route 1. SHA should look at the possibility of developing a parallel corridor.

Response:

The extension of Perring Parkway was considered in the 1970's and it was dropped due to public opposition at that time. Since then, development has occurred along this corridor making it more difficult to implement this plan now.

No major widening of Harford Road is currently being considered because of the existing substandard alignment and terrain which would cause extensive impacts along this route and make the project very expensive. However, portions of Harford Road are listed for improvements in our long-term Highway Needs Inventory.

The East-West Freeway as planned in the late 1960's was dropped from consideration, and it is no longer listed in our plans or in the county master plans.

- 5. E. Farrell Maddox - Maryland Delegate, District 6 - Harford County

Comment:

Delegate Maddox endorsed the Six-Lane Alternate.

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Response:

The Six-Lane Alternate has been selected.

6. Al Redmer, Jr. - President, Perry Hall Improvement Association

Comment:

Mr. Redmer endorsed widening of U.S. Route 1, but wants the speed limit reduced and only four lanes (with a center turn lane) through Perry Hall. Mr. Redmer also supports the need to study a parallel corridor.

Response:

Current traffic projections indicate that a Four-Lane Alternate (with a center turn lane) would do no more than the NO Build alternate with respect to providing the needed traffic capacity (see Tables I-6 and I-7). Without an additional lane in each direction, many of the intersections and roadway links would fail by the design year. The Four-Lane Alternate has been eliminated from consideration because it failed to meet the projected traffic need. The Six-Lane Alternate has been selected. Speed limit reductions, however, are being considered as a part of this project. The response to comment number 4 addresses the comment for the study of a parallel corridor.

7. Claude Rawl - Citizen - 1125 Belair Road

Comment:

Mr. Rawl was concerned about a property between Mt. Vista Road and Big Gunpowder Falls.

Response:

Mr. Rawl was advised to speak to a SHA resource person at the wall display to answer his specific questions concerning the property.

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- 8. Ron Sanders - Chairman, Belair Road Citizens Advisory Committee - 8811 Dearborn Drive

Comment:

The CAC has proposed the widening of U.S. Route 1 to six-lanes from Silver Spring Road to Penn Avenue, and to four-lanes with a median and/or left turn lane from Penn Avenue to Mountain Road. SHA has offered to stage the widening to six-lanes based upon traffic need. The CAC would still prefer the ultimate widening to four-lanes north of Penn Avenue. Mr. Sanders also called for the study of a parallel corridor.

Response:

The responses to these comments have been addressed in responses 1, 4, and 6.

- 9. Phyllis Waidner - Citizen 4139 Whittlesey Avenue

Comment:

Ms. Waidner was concerned about a development and new road near Blakely Avenue.

Response:

Blakely Avenue is a county road and the decision whether to extend Blakely Avenue must be made by the County.

- 10. Bill Paulshock - Citizen - 9016 Belair Road

Comment:

Mr. Paulshock thanked Senator Bromwell for forming the CAC.

Response:

No response is necessary to this comment.

11. Richard Sammis - Town and Country Pontiac/Nissan
8903 Belair Road

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Comment:

Mr. Sammis was concerned about access to his business and would like a median opening across from his entrance.

Response:

Due to its proximity to the Joppa/Ebenezer intersection, a median crossing cannot be provided. SHA will continue to study the feasibility of providing permanent access to this property from the shopping center side.

12. Howard L. Dickson - 7-11 - 9617 Belair Road

Comment:

Mr. Dickson supports the study of a parallel corridor such as Harford Road.

Response:

The response to this comment has been addressed in response number 4.

13. Beverly Meyler - Citizen - 8922 Kilhenny Circle, Perry Hall

Comment:

Ms. Meyler supports the Six-Lane Alternate but would like more consideration given to left turn access. Ms. Meyler also supports the study of a parallel corridor.

Response:

Left turn access has been maximized to the safest extent possible. Left turn access will, of course, be provided at all signalized intersections. A total of sixteen (16) median openings and/or continuous left-turn slots are

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provided between Silver Spring Road and Forge Road (See Figures II-7 and II-8). The response to the study of a parallel corridor has been given in response number 4.

14. Louise Reichert - Citizen - 9516 Belair Road

Comment:

Ms. Reichert asked the left turn access be provided at St. Michael's Church and all public buildings. Ms. Reichert further stated that the widening will be dangerous to pedestrians, especially children. Ms. Reichert wanted to know what the right-of-way requirements would be and if a guardrail could be installed. She also wanted more cross roads between U.S. Route 1 and Harford Road and between U.S. Route 1 and I-95, and the study of one-way pairs through Perry Hall.

Response:

A median opening has been provided to St. Michael's Church at their parking lot entrance. Median openings have been provided at the public schools and at the fire station. The proposed right-of-way would be 106 feet, with slope easements averaging 3 to 5 feet (through Perry Hall). Guardrail will not be provided, the curbs and lower speed limit will minimize property damage from vehicles on U.S. Route 1.

An east-west cross road has been studied in the past.

One-way pairs through Perry Hall were briefly considered; however, the residential development extends to the east and west well beyond U.S. Route 1 making it infeasible to develop a by-pass. One-way pair systems must operate within close proximity (less than one block) of each other in order to maintain continuity of traffic flow.

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15. Jean Siegrist - Citizen - 9221 Belair Road, Perry Hall

Comment:

Will there be any proximity damages such as grading, retaining walls, septic systems, noise levels?

Response:

Where feasible, design features such as retaining walls and increased slope gradients would be considered to minimize proximity damage. If proximity damages become severe enough (i.e. damage to septic systems), SHA will acquire the property. Noise abatement was considered; however, due to access requirements and high construction cost per residence, abatement was determined to be not feasible and not cost-effective.

16. Carl Klausmeir - Citizen - 4116 Klausmeir Road

Comment:

Would left turn access be provided into Mr. Klausmeir's business against six-lanes of traffic thru Perry Hall?

Response:

Mr. Klausmeir's business would be acquired for right-of-way under the Six-Lane Alternate.

17. Tom Welzenbach - Citizen - 4711 Harford Road

Comment:

Mr. Welzenbach was concerned about the extent of construction impacts to Perry Hall. Mr. Welzenbach also supports the study of a parallel corridor.

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Response:

The widening of U.S. Route 1 would be undertaken in stages such that construction impacts would be limited to smaller sections of the corridor. The response to the study of a parallel corridor has been given in response number 4.

18. William Brockmeyer - Logan's Lounge (Belair Road at Big Gunpowder Falls)

Comment:

Mr. Brockmeyer was concerned about left turn access into his business. He stated the nearest turn-arounds are too far away (2 miles). Mr. Brockmeyer also stated that another east-west connector from U.S. Route 1 to York Road was needed.

Response:

A median opening has been provided for left turn movements at this business. The response to the need for an east-west was addressed in response number 4.

19. Marvin Johnson - ABC Rental - 8801 Belair Road, Perry Hall

Comment:

Mr. Johnson supports the study of a parallel corridor.

Response:

The response to the study of a parallel corridor was addressed in response number 4.

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20. Terry Neifeld - Germantown Building and Loan Association
9637 Belair Road

Comment:

Mr. Neifeld was concerned about the relocation of his business near its existing location and said that consideration should be given regarding the historic nature of the bank. Mr. Neifeld stated that one appraisal is not adequate for the proper compensation of his business.

Response:

This property was reviewed by the Maryland Historical Trust but was not deemed eligible for inclusion on the National Register. Information regarding SHA's acquisition policy was provided.

21. Dick Colgan - Citizen - 11815 Belair Road, Kingsville

Comment:

Mr. Colgan was concerned about proximity damages to his property which is located on the east side of U.S. Route 1 in Kingsville. He stated that the alignment could be shifted slightly to avoid his property and that more consideration should be given to avoiding residences than businesses. Mr. Colgan also believes a signal is needed just south of the funeral home.

Response:

Every effort will be made during final design to minimize proximity impacts to all adjacent properties. Signal warrants will also be re-examined during final design. A meeting was held with Mr. Colgan on April 14, 1989 to discuss his specific concerns.

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22. Gus Diakoulas - Citizen - 9120 Belair Road

Comment:

Mr. Diakoulas was concerned about proximity damage to his parents' property which is located on the east side of U.S. Route 1, just north of Joppa Road. He is also concerned about high speed vehicles through Perry Hall. Mr. Diakoulas also supports the study of a parallel corridor.

Response:

Every effort will be made to minimize proximity impacts and speed limits will be reduced through Perry Hall. The response to the study of a parallel corridor has been addressed in response number 4.

23. Paula Sorrell - Citizen - 11824 Belair Road

Comment

Ms. Sorrell believes that the widening of U.S. Route 1 would be senseless due to the overburdening number of access points and supports the study of a parallel corridor such as Harford Road.

Response:

The center median will help control access to U.S. Route 1. The response to the study of a parallel corridor has been addressed in response number 4.

24. John Boyd - Citizen - 11212 Sheradale, Kingsville

Comment

Mr. Boyd is against the widening of U.S. Route 1 north of Joppa Road because he believes that six-lanes with a median would make it difficult to gain access to homes and businesses.

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Response:

Significant efforts were made (in conjunction with the CAC) to minimize access impacts to residences and businesses. Median openings and continuous left turn lanes are being provided where safety permits.

Left turn access will, of course, be provided at all signalized intersections. A total of sixteen (16) median openings and/or continuous left-turn slots are being provided between Silver Spring Road and Forge Road (See Figures II-9 and II-10).

- 25. Bob Long - Citizen - Mt. Vista Road, Kingsville

Comment:

Mr. Long supports the study of a parallel corridor such as the extension of Perring Parkway.

Response:

The response to the study of a parallel corridor has been addressed in response number 4.

- 26. Buddy Butt - Citizen - 9511 Belair Road

Comment:

Mr. Butt supports Four-Lane Alternate and a speed limit reduction to 35 mile per hour.

Response:

The response to the use of the Four-Lane Alternate has been addressed in response number 6. A speed limit reduction is being considered as part of this project. A decision will be reached during final design.

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27. Robert Rye - Citizen - 9861 Belair Road

Comment:

Mr. Rye was concerned about noise abatement and the location of potential noise barriers.

Response:

In general, the proposed widening of U.S. Route 1 would not substantially increase noise levels over either existing conditions or No Build. At six noise sensitive areas, however, the noise abatement criteria will be approached or exceeded. Noise abatement has been demonstrated (in the environmental document) not to be reasonable and feasible at all six of these areas. See Section IV-E of this document for a discussion of noise impacts.

28 Dick Colgan - Citizen - 11815 Belair Road, Kingsville

Comment:

Mr. Colgan questioned the avoidance of the Days-Dean-King House, a historic site, to the detriment of the homes and business in Kingsville.

Response:

Section 4(f) of the U.S. Department of Transportation Act of 1966 requires that historic sites eligible for the National Register of Historic Places be accorded special consideration. These sites must be avoided unless it is not feasible and prudent to do so. Mr. Colgan has been advised to contact the State Historic Preservation Officer.

Avoidance alternates are considered feasible and prudent unless it can be demonstrated that there are unique problems, truly unusual factors present, and evidence that

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the cost or community disruption resulting from alternative routes reaches extraordinary magnitudes.

29. Tom Welzenbach - Citizen - 4711 Harford Road

Comment:

Mr. Welzenbach stated that the CAC was successful in influencing the design of the Six-Lane Alternate and the saving of 11 properties.

Response:

It is SHA's policy to remain open and flexible to public concerns.

30. Lettie Hack - Citizen - 11801 Belair Road, Kingsville

Comment:

Ms. Hack said she was opposed to Kingsville Option F because it takes her apartment building.

Response:

Option F is preferred because it minimizes overall residential and business displacement. Ms. Hack will be compensated for the loss of her property (including relocation assistance) in accordance with the Relocation Assistance Act.

31. Elmer Henry Hack - Citizen - 9641 Belair Road

Comment:

Mr. Hack was concerned about receiving the full price for an up-zoned property owned by Irene Dietz Partnership.

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Response:

Fair market value will be paid for properties that will be acquired according to the SHA acquisition policy.

32. Elmer Henry Hack - Butt's Service Station - 8832 Belair Road

Comment:

Mr. Hack requested that he be able to continue to operate his business and that if frontage is required for right-of-way, that the full going price for commercial land should be paid.

Response:

It may be possible to keep this business in operation by removing the unused canopies. This will be studied further during final design. Fair market value will be paid for properties that will be acquired according to the SHA acquisition policy.

33. Kyrle W. Preis, Jr. - Heathcote Lawn and Garden Center
12301 Belair Road, Kingsville

Comment:

Mr. Preis requested that a median opening be placed in front of his lawn and garden center.

Response:

A median opening at this location was studied. Because of the steep slope of the adjacent property, however, it is not safe to provide a cross over at this location without a regrading of the driveway and the roadway to make a provision for U-turns. This cross over will be re-examined during final design.

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34. William J. Butt - Citizen - 9511 Belair Road

Comment:

Mr. Butt was concerned about safety issues relating to the Six-Lane Alternate.

Response:

The proposed median will enhance the safety of the Six-Lane Alternate.

35. Jim Martin - Citizen - 2829 Harford Road, Fallston

Comment:

Mr. Martin was concerned about the floodplain and flooding of Wildcat/Rocky Branch under the Six-Lane Alternate. He was also concerned about left turn access to his business. Mr. Martin supports the revitalization of the Perring Parkway project.

Response:

The culvert (or culvert extension) for this stream will be designed such that there will be no increased flooding potential. The response to the parallel corridor comment was addressed in response number 4.

36. Dr. James Nicholas Leyco - Citizen - 4202 Forge Road,
Perry Hall

Comment:

Dr. Leyco wants the traffic signal at U.S. Route 1 and Forge Road to remain.

Response:

This signal is scheduled to remain.

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VII.C. D.E.I.S. COMMENTS FROM AGENCIES



United States Department of the Interior

OFFICE OF ENVIRONMENTAL PROJECT REVIEW
WASHINGTON, D.C. 20240

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PROJECT
TAKE PRIDE IN AMERICA

FEB 3 1989

ER 88/1026

Mr. Porter Barrows
Division Administrator
Federal Highway Administration
711 West 40th Street, Suite 220
Baltimore, Maryland 21211

Dear Mr. Barrows:

This responds to your request for the Department of the Interior's comments on the draft environmental/Section 4(f) statement for U.S. Route 1 from Silver Springs Road to Maryland Route 152, Baltimore and Harford Counties, Maryland.

SECTION 4(f) STATEMENT COMMENTS

We concur that, if transportation objectives are to be achieved, there are no feasible and prudent alternatives to the use of some portions of Gunpowder Fall State Park for the proposed project.

With regard to the second proviso of Section 4(f), measures to minimize harm, we recommend that the following measures be considered in addition to those listed on pages V-5 and V-6 for the six-lane widening across Little Gunpowder Falls:

- 1. Bridge structures should be designed to accommodate an equestrian trail (rider atop horse) on at least one side of Little Gunpowder Falls. The clearance should be 12'0".
- 2. Emergency access points should be provided.
- 3. Provision should be made for a pedestrian/horse crossing of Little Gunpowder Falls.

We also recommend continued coordination and consultation with the Maryland State Liaison Officer regarding mitigation measures for the protection of recreational resources within the selected alignment. The final document should include evidence of such consultation as well as that agency's concurrence with project plans.

ENVIRONMENTAL ASSESSMENT COMMENTS

Fish and Wildlife Resources

We recommend that all unavoidable wetland losses be replaced on a 2:1 basis for palustrine forested wetlands and on a 1:1 basis for all other wetland types. The 2:1 replacement ratio for forested wetlands will compensate for the time lag of 40 to 50 years which are required for planted seedlings to reach maturity. Mature trees provide the nest cavities, shelter, and mast needed by numerous species of wildlife.

①
②
③
④
⑤

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FISH AND WILDLIFE COORDINATION ACT COMMENTS

The U.S. Fish and Wildlife Service advises that its most probable position on any Section 404 permits for this project would likely be no objection provided an acceptable compensation plan is developed and a viable compensation site is identified.

SUMMARY COMMENTS

The Department of the Interior has no objection to Section 4(f) approval of the six-lane alternative, providing the measures mentioned above are included and documented in the final statement.

For technical assistance on matters related to recreational resources please contact the Regional Director, National Park Service, Mid-Atlantic Region, 143 South Third Street, Philadelphia, Pennsylvania 19106 (telephone: FTS 597-7013, commercial 215/597-7013). For matters relating to fish and wildlife resources please contact the Field Supervisor, U.S. Fish and Wildlife Service, 1825 Virginia Street, Annapolis, Maryland 21401 (telephone: 301/269-5448).

We appreciate the opportunity to provide these comments.

Sincerely,

John H. Farrell
ACTING DIRECTOR

cc:

- ✓ Maryland State Highway Administration
- ✓ Maryland State Department of Natural Resources

RESPONSE TO U.S. DEPARTMENT OF THE INTERIOR

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1. A bridge structure designed to accommodate an equestrian trail at the Little Gunpowder Falls will be considered during final design (see DNR coordination summary in Section V of the FEIS).
2. Emergency access can be investigated during final design; however, DNR did not specifically request such access for the Little Gunpowder Falls area.
3. Provisions will be made for pedestrian/horse crossing of U.S. Route 1 at Little Gunpowder Falls.
4. Continued coordination with DNR has occurred (see letter on page VII.A-34).
5. The wetlands replaced by this project are, primarily, upland runoff type wetlands. The replacement wetlands will, most likely, be consolidated on a 1:1 basis into one or two replacement sites within the U.S. Route 1 corridor. This consolidation process will produce larger wetlands with greater overall value.



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MARYLAND
DEPARTMENT OF STATE PLANNING
 301 W. PRESTON STREET
 BALTIMORE, MARYLAND 21201-2365

WILLIAM DONALD SCHAEFER
 GOVERNOR

December 6, 1988

CONSTANCE LIEDER
 SECRETARY

Mr. Neil J. Pedersen
 Department of Transportation - SHA
 707 N. Calvert Street
 Baltimore, Md., 21203-0717

Reply Date Due: January 24, 1988

State Application Identifier: MD881201-0889

State Clearinghouse Contact: Samuel Baker

RE: Draft EIS - US 1, From Silver Spring Rd. to Md. 152

Dear Mr. Pedersen:

This is to acknowledge receipt of the referenced project. We have initiated the Maryland Intergovernmental Review and Coordination Process as of this date. You can expect to receive review comments and recommendations on or before the reply date indicated. If you have any questions concerning this review, please contact the staff member noted above.

The State Application Identifier (SAI) must be placed on any financial assistance application form and used in future correspondence.

We are interested in the referenced project and will make every effort to ensure a prompt review. Thank you for your cooperation.

Sincerely,

Mary J. Abrams
 Director, Maryland State Clearinghouse
 for Intergovernmental Assistance

MJA: SB:mk

RECEIVED

DEC 8 1988



292

MARYLAND
DEPARTMENT OF STATE PLANNING
301 W. PRESTON STREET
BALTIMORE, MARYLAND 21201-2365

WILLIAM DONALD SCHAEFER
GOVERNOR

CONSTANCE LIEDER
SECRETARY

January 31, 1989

Mr. Neil J. Pedersen
 Director, Office of Planning and
 Preliminary Engineering
 State Highway Administration
 707 North Calvert Street
 Baltimore, Maryland 21203

RECEIVED

FEB 3 1989

**DIRECTOR, OFFICE OF
 PLANNING & PRELIMINARY ENGINEERING**

SUBJECT: REVIEW AND RECOMMENDATION

State Application Identifier: MD881201-0889
 Applicant: MDOT - State Highway Administration
 Description: Draft EIS - US 1, From Silver Spring Road to Md. Rte. 152
 Location: Baltimore County
 Approving Authority: DOT
 Recommendation: Endorsement Subject to Comments

Dear Mr. Pedersen:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 16.02.01, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. As a result of the review, it has been determined that the project is consistent with Maryland's plans, programs and objectives as of this date. The State process recommendation is endorsement. Comments advised that stormwater management and sediment control measures should be implemented during and after construction. Also, it was noted that the six-lane alternative would serve both traffic volume and safety purposes.

All directly affected State and local public officials were provided notice of the project. Review comments were requested from the following local jurisdictions and regional and State agencies: Baltimore County, Regional Planning Council, Department of Public Safety and Correctional Services, Department of General Services, Department of Housing and Community Development including the Maryland Historical Trust (SHPO), Department of the Environment, Department of Health and Mental Hygiene, Department of Natural Resources including the Coastal Zone Resources Division, Department of Education, and the Department of State Planning.

The following specific comments are provided for your consideration:

Department of the Environment advised that steps should be taken to ensure positive sediment control during construction and provide stormwater management after construction. ①

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Mr. Neil J. Pedersen
January 31, 1989
Page Two

Department of Public Safety and Correctional Services concur with the report and feel the need to improve U. S. Route 1 is paramount. At present, U. S. Route 1 is considered a very dangerous highway since it is a four-lane roadway with no center barrier. Strictly for safety reasons, the six-lane alternative with a jersey barrier would best serve the heavy commuting traffic.

②

The State Historic Preservation Officer has determined that the project will not affect known archeological or historic resources. This "determination of no effect" evidences that the requirements of Section 106 of the National Historic Preservation Act and the federal Advisory Council on Historic Preservation's regulations (36 CFR Part 800) have been met for the project. This letter is evidence of compliance with federal and State historic preservation review requirements.

Department of Natural Resources has not responded to inquiries of this date; however, if comments are received, they will be forwarded.

Baltimore County noted that Councilman Evans requested that a copy of the environmental report be forwarded to Mr. Ron Sanders, 8811 Dearborn Drive, Baltimore, Maryland 21236.


③

In response to the review request, this letter with attachments constitutes the State process recommendation. The applicant is required to include a copy of this letter with attachments and a statement of consideration given to the comments and recommendation with the application that is submitted to the federal approving authority. A copy of this statement should also be submitted to the State Clearinghouse. Additionally, you are required to place the State Application Identification (SAI) Number on the application for financial assistance.

The State Clearinghouse must be informed if the recommendation cannot be accommodated by the federal approving authority. The Clearinghouse recommendation is valid for a period of three years from the date of this letter. If the approving authority has not made a decision regarding the project within that time period, information should be submitted to the Clearinghouse requesting a review update.

We appreciate your attention to the intergovernmental review process and look forward to continued cooperation.

Sincerely,


Mary J. Abrams
Director, Maryland State Clearinghouse
for Intergovernmental Assistance

MJA:SB:r

Attachments

cc: Bruce Gilmore (DNR) Roland English (DSP)
Sheiala Moskow (DHCD) Lorraine Flowers (MSDE)
Mac Voelcker (MDE) Eric Walbeck (DGS)
Daryl Rawlings (RPC) John O'Neill (DPSCS)

VII.C-6

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RESPONSE TO MARYLAND DEPARTMENT OF STATE PLANNING

1. The State Highway Administration certifies that the sediment and erosion control plan will be strictly enforced during construction. Stormwater management will be designed into the project to minimize impacts to water quality after construction.
2. The jersey barrier is no longer being considered for this project; however, it has been replaced by a 16-foot grassed median. A continuous left-turn lane is being considered in the area of dense urban development.
3. Mr. Sanders was provided a copy of the DEIS.

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Director
Maryland State Clearinghouse
for Intergovernmental Assistance
1 West Preston Street
Baltimore, Maryland 21201-2365

DEPARTMENT OF STATE PLANNING
RECEIVED

JAN 10 1989

SUBJECT: REVIEW AND RECOMMENDATION

State Application Identifier: MD881201-0889

Applicant: MDOT - State Highway Admin.

Description: Draft EIS - US 1, From Silver Spring Rd. to Md. 152

| | | | |
|----------|---------|------------|-------|
| SEARCHED | INDEXED | SERIALIZED | FILED |
| | | | |

Responses must be returned to the State Clearinghouse on or before January 19, 1988.

Based on a review of the notification information provided, we have determined that:

Check One:

- 1) It is consistent with our plans, programs, and objectives. For those agencies which are responsible for making determinations under the following federal consistency requirements, please check the appropriate response:

It has been determined that the project has "no effect" on any known archeological or historic resources and that the requirements of Section 106 of the National Historic Preservation Act and 36 CFR 800 have been met.

It has been determined that the requirements of Maryland Coastal Zone Management Program have been met for the project in accordance with 16 USC 1456, Section 307(c)(1) and (2).

- 2) It is generally consistent with our plans, programs, and objectives, but the qualifying comment below is submitted for consideration.

- 3) It raises problems concerning compatibility with our plans, programs, or objectives, or it may duplicate existing program activities, as indicated in the comment below. If a meeting with the applicant is requested, please check here .

- 4) Additional information is required to complete the review. The information needed is identified below. If an extension of the review period is requested, please check here .

- 5) It does not require our comments.

COMMENTS: See attached comments.

(Additional comments may be placed on the back or on separate sheets of paper.)

Signature: [Signature]

Name: John J. O'Neill

Organization: Department of Public Safety and Correctional Services

Address: Suite 310 - 6776 Reisterstown Road
Baltimore, MD 21215

MARYLAND STATE POLICE

297

Mr. John O'Neill, DRS&CS

DATE Jan. 3, 1989

FROM Colonel E. H. Tippet, Superintendent

- | | |
|--|---|
| <input type="checkbox"/> For your information | <input type="checkbox"/> Take charge of |
| <input checked="" type="checkbox"/> As requested | <input type="checkbox"/> For additional information |
| <input type="checkbox"/> Approve and return | <input type="checkbox"/> For comment/recommendation |
| <input type="checkbox"/> Note and return | <input type="checkbox"/> Give me facts so I can answer |
| <input type="checkbox"/> See me | <input type="checkbox"/> Prepare reply for my signature |

RE: Project Evaluation Draft - MD881201-0889

We have received your Project Evaluation Draft concerning U.S. Route 1 from Silver Spring Road to Maryland Route 152.

As the Maryland State Police have no patrol responsibilities in Baltimore County on U.S. Route 1, the proposed changes would actually have little impact on our operations in Baltimore County. However, we do have full responsibility for the remaining section of U.S. Route 1 in Harford County.

We are in concurrence with your report and feel the need to improve U.S. Route 1 is paramount. This highway is a major link to an ever-increasing population in Harford County. Presently, U.S. Route 1 is considered a very dangerous highway in that it is a four lane roadway with no center barrier. Strictly for safety reasons, the "six lane alternative" with a jersey barrier would best serve the heavy commuting traffic. Although the number of collisions in our area is not great, the amount of head-on type collisions with personal injuries are frequent. The six lane alternative would serve both traffic volume and safety purposes for many years in the future.

Even though Interstate 95 has replaced U.S. Route 1 as the major link to Baltimore, many residents are now looking for an alternate commuting route, as Interstate 95 is frequently backed up with traffic. An improved U.S. Route 1 would offer such an alternative and relieve, in part, much of the commuting traffic on Interstate 95.

EHT:sg

Attachment

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TO: Mr. Frank Fisher
Office of Planning and Zoning
401 Bosley Avenue
Towson, Maryland 21204

Date: December 8, 1988

RE: PROJECT REVIEW FORM

Project: Draft EIS - US 1, Silver Spring Road to
MD Rt. 152

R & R File Number: 0889-89006 (St. ID #: 881201-0889)

Comments should be returned by: 1/10/89

Check One

- This agency has no comments on this proposal.
- This project is consistent with or contributes to the fulfillment of local comprehensive plans, goals, and objectives.
- This project raises issues concerning compatibility with local plans or intergovernmental problems, and a meeting with the applicant is requested. (Explain below.)
- This project raises issues concerning compatibility with local plans or intergovernmental problems; however, a meeting with the applicant is not requested. (Explain below.)
- This project is generally consistent with local plans, but qualifying comments are necessary. (Explain below.)

Comments Councilman Evans requests that the environmental report be sent to a Mr. Ron Sanders, 8811 Dearborn Dr., Baltimore, Md. 21236.

RETURN TO LOCAL REFERRAL COORDINATOR
NAMED ABOVE

Signature [Signature]
 Title County Coordinator
 Agency Baltimore County Council

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MEMORANDUM
Maryland Department Of The Environment

To: Samuel Baker, State Clearinghouse
From: Ken Shanks
Subject: Draft EIS -- US 1, From Silver Spring Road to Md. 152
Date: December 13, 1988

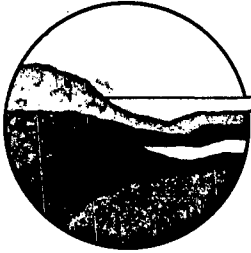
The information presented on pages III-21 and III-22 regarding the State classification of streams in the study area should be updated. A copy of the current regulations are attached for the State Highway Administration's convenience.

In general, SHA should be aware that regulatory responsibility for stream classification left the Department of Natural Resources in 1980 when then Governor Hughes re-organized Maryland's environmental programs. In 1987, the responsibility moved to the newly created Department of the Environment which continues to exercise that authority.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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1. This information has been updated based on current regulation. There is no change, the Little Gunpowder Falls and all its tributaries are still Class III streams in the study area.



Maryland Department of Natural Resources

Water Resources Administration

Tawes State Office Building
Annapolis, Maryland 21401
Telephone: (301) 974-2265

PROJECT DEVELOPMENT DIVISION

301

NOV 29 1988

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Catherine P. Stevenson
Director

November 29, 1988

Mr. Louis H. Ege, Jr., Deputy Director
Project Development Division (Room 506)
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

Attn: Cynthia Simpson

Re: WRA No. 88-PP-0135
SHA No. B-813-101-471
U. S. 1 - Silver Spring Road to MD
152 - Draft Environmental Impact
Statement/Section 4(f) Evaluation

Dear Mr. Ege:

We would like to request an extension of the December 23, 1988 date which we have been given to provide you with comments on the above referenced document. The earliest date that we can provide you with comments would be January 9, 1989. However, if all of our comments are compiled before this date, we will forward them to you.

Thank you for your cooperation.

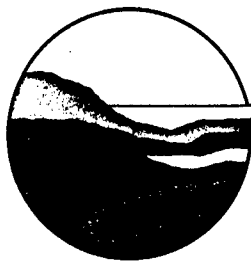
Very truly yours,

Michele A. Huffman

Michele A. Huffman
Project Engineer
Waterway Permits Division

MAH:das

302



Maryland Department of Natural Resources

Water Resources Administration

Tawes State Office Building
Annapolis, Maryland 21401
Telephone: (301) 974-2265

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Catherine P. Stevenson
Director

January 23, 1989

Mr. Louis H. Ege, Jr.
Deputy Director
Project Development Division
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

Re: WRA File No. 89-PP-0135
SHA No. B-813-101-471
US 1 - Silver Spring Road to MD 152
Draft Environmental Impact Statement/
Section 4(f) Evaluation

Dear Mr. Ege:

Your submission of the Draft Environmental Impact Statement/Section 4(f) Evaluation has received the necessary review. The enclosed memorandum dated January 12, 1989 from Elder Ghigiarelli, Jr. includes comments from the Power Plant and Environmental Review Division. In addition to these comments, we feel that in order for the least amount of impact on nontidal wetlands to occur, the widening should be done on the west side of US 1 at wetland #11 and on the east side at wetland #13. By widening on the east side at wetland #13, the tributary to Gunpowder Falls can be avoided. Also, the streams at wetland #8 and #9 should be piped rather than filling the wetland completely.

①

If you have any questions or comments, please do not hesitate to contact me at (301) 974-2265.

Very truly yours,

Michele A. Huffman
Project Engineer
Waterway Permits Division

MAH:das

Enclosure

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RESPONSE TO WATER RESOURCES ADMINISTRATION - MICHELE HUFFMAN

1. Wetlands #11 and #13 cannot be avoided. Widening all to the west to minimize impacts to Wetland W11 is not practicable since the resulting change in the alignment would impact the Days-Dean-King house (a National Register historic site). Wetland W13 lies on both sides of U.S. Route 1 and cannot be avoided. The streams of Wetlands 8 and 9 will be piped to insure the continued free flow of water and eliminate backwater ponding.



Maryland Department of Natural Resources

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Tidewater Administration

Tawes State Office Building
580 Taylor Avenue
Annapolis, Maryland 21401

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

January 12, 1989

Memorandum

To: Michele Huffman, WRA
Waterway Permits Division

From: Elder A. Ghigiarelli, Jr., Chief, TA
Project Evaluation and Federal Consistency

Subject: Power Plant and Environmental Review Division's
comments on MDSHA Draft Environmental Impact Statement
(EIS) Section 4 (f) Evaluation document for U.S. Route
1 from Silver Spring Road to Maryland Route 152.
Baltimore and Harford County, Md.; Gunpowder River
Area drainage.

Power Plant and Environmental Review (PPER) has the following comments and concerns pertaining to the subject roadway improvements:

1. Page s-10: Number 16, concerning changes to the overland flow of stormwater and reduction of the ground's absorption capacity, is checked no. The up-grading of the existing U.S. Rte. 1 will significantly change the overland flow of stormwater and reduce the absorption capacity of the ground. The modified 6-lane build alternate will alter soil stabilization, topographical contours, precipitation sheet flow, and clear-cutting of woodlands.

These alterations of the landscape have the potential to severely impact aquatic resources and create irreparable cumulative effects to the living resources of the Gunpowder River Watershed and eventually the Chesapeake Bay. Specific measures should be incorporated to minimize the impacts to aquatic resources from increased stormwater discharges from increased roadway pavement and landscape alterations.

Telephone: (301) 974-2784

DNR TTY for Deaf: 301-974-3683

305

Michele Huffman
January 12, 1989
Page 2

2.) Page s-10: Number 21, concerning discharges into surface or sub-surface water, is checked no. The increased surface area of a 6-lane highway will result in discharge of increased pollutant-laden materials to the surface and sub-surface water of the Gunpowder River's watersheds.

3.) Page s-10: Number 24, concerning the effect an ambient air quality parameters, is marked no. MDSHA should consider the cumulative effects to regional air quality of an increase of automobile emissions (CO) from 32,000 to 60,000 motorists daily.

4.) Page II-13: PPER strongly encourages that the new bridge structure over the Gunpowder Falls be as long or longer than the existing structure to protect wetlands, riparian woodlands, aquatic resources, and the beneficial natural values of this pristine old geomorphic 100-year floodplain.

5.) Figure II-9: The figure depicts a proposed retaining wall crossing the tributary stream behind Mike's Barber Shop. Will this stream be relocated? Please reference our 17 April 1986 letter concerning the stream relocations and their associated severe traumas to aquatic resources (Page VII-VIII). DNR has regulations which prohibit the emplacement of any structure that will inhibit fish spawning migration and ethological movements at any stream crossing.

All galvanized pipe structures should be bottomless arches or depressed bottom configurations designed to facilitate the formation of a natural steambed. Culvert floors should be designed to provide a "V" or dish-shaped channel so as to concentrate stream flow during low water periods.

6.) Figures II-9-12: The document figures do not name the smaller streams. The environmental document should name and class each stream crossing to facilitate review.

7.) Figure II-12: PPER recommends that the Little Gunpowder Falls crossing bridge the entire 100-year floodplain (See Comment 4).

8.) Page III-18: Pages III-18 through III-21 are out of order.

Michele Huffman
January 12, 1989
Page 3

9.) Page III-20: PPER recommends that the final document contain an environmental features map in the Affected Environment Section for adequate review of the various natural resources.

10.) Page III-28 and III-29: The document should include a section describing riparian habitats and a section on interior dwelling forest/woodland bird species. This habitat type does exist within the study area.

11.) Page III-31: The Draft EIS does not include sufficient information and/or any description of specific stream characteristics within the study area or the associated impacts to such aquatic resource habitats.

12.) Pages III-33 through 45: PPER recommends that the wetland tables information include the MDE stream classification of the hydrologic system.

13.) Page IV-19: We would like to be consulted during the final design planning of the rock excavation and bedrock blasting in the vicinity of the Gunpowder River crossings. Soil boring analysis reports should be available for review prior to pre-permit coordination.

14.) Page IV-20: Water Quality Impacts (a.) supports our concerns stated in comment No. 1. The EIS 4(f) states (pg. I-4) by the year 2005, the daily usage of U.S. Rte. 1 will increase to 60,000 motorists. On page IV-20, MDSHA notes that 50,000 ADT has the potential for toxic effects on aquatic resources (Winters and Gidley, 1980; Portele et. al. 1982). As previously noted, measures should be undertaken to ameliorate the impacts to water quality and aquatic life while constructing a 6-lane highway, despite the claim that the highway runoff will be diluted by the 100:1 receiving water factor.

15.) Page IV-23, 3.: Tidewater Administration requests that MDSHA commit to bridging Gunpowder Falls, Little Gunpowder Falls and Wildcat Branch crossings. Also, it is not clear how the retaining wall and proposed right-of-way grading will not modify/relocate the stream near Gunpowder Falls mainstem (See Comment No. 5.).

16.) Page IV-25: We strongly encourage the use of jersey barriers to reduce the impacts to the aquatic resources (wetlands) of the project area.

Michele Huffman
January 12, 1989
Page 4

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17.) Page IV-28: PPER does not consider the loss of 40 acres of mature hardwood forest and 6 acres of scrub/shrub vegetation to be insignificant. The loss of this habitat will not necessarily result in a proportional loss of riparian wildlife populations; however it will disrupt the trophic levels of an ecosystem that presently is at equilibrium, possibly with synergistic affects.

18.) Page IV-29: The up-grading of the subject roadway will have a direct and measurable impact to aquatic resources via roadway pollutants and stormwater discharges directly into streams. This is not a "potential" impact to aquatic habitat.

19.) Page IV-29: Responsibility for maintenance of the stormwater management control measures that will reduce the adverse impacts to aquatic ecosystems should be addressed.

EG:JM:swp

RESPONSES TO MD DNR COMMENTS

1. While it is true that contours will change and that soil stability and overland flow characteristics will change, there are a number of measures that can be incorporated to minimize their impacts. This would include effective erosion and sediment control measures during construction, permanent stabilization once construction is completed, runoff control measures (retention/detention basins, overland flow through negated areas, grassed swales, etc.) and landscaping will minimize their potential impacts. Since the construction is localized and if proper controls as mentioned above are used, then impacts to the Gunpowder River and the Chesapeake Bay should not be severe or irreparable.

2. The increased surface area will increase the efficiency with which pollutants are collected and washed off. However, the loadings will vary depending on the antecedent dry days to a storm, the frequency of storms, the intensity and duration of the storm, the intensity of the runoff, the characteristics of the drainage system (swales vs. pipes, number of points of discharge, runoff control measures, etc.) and dilution ratios. Also, research on highway runoff has shown that there is a correlation between ADT and solids (which acts as a carrier for other pollutants). Regardless of the extra two lanes, the ADT for the No-Build will still increase to the levels indicated for the Build Alternative. Therefore, loadings will increase and with a No-Build there will be no measures to mitigate those loadings.

Since pollutants are associated with particulates and since the stormwater is likely to be discharged via a drainage system, and since the soil profile can sometimes act as a filtering mechanism, it is doubtful that subsurface water will be significantly impacted.

3. Since this project originates from a conforming transportation improvement program, it conforms to the State Implementation Plan. By definition, therefore, this project will not have an adverse effect on regional air quality.
4. Various bridge types and lengths will be considered during final design. The final selection will balance costs, floodplain, wetland and natural values.

Current plans provide for a replacement structure at the Big Gunpowder consisting of five, bottomless steel arches. The span and openings of the proposed structure will be designed to minimize impacts to the 100-year floodplain, in accordance with State and Federal regulations. Since the existing structure is currently topped by the 100 year storm, the raising of the new structure above the 100 year storm elevation should reduce impacts to the floodplain.

5. Figure II-9 does not depict a proposed retaining wall behind Mike's Barber Shop. There are no stream relocations associated with this project. The alignment in the vicinity of the Big Gunpowder was moved towards the east to avoid relocating streams that currently parallel U.S. Route 1.
6. With the exception of the Big Gunpowder Falls, Little Gunpowder Falls, Rocky Branch and Wildcat Branch, all other tributaries in the corridor are unnamed.
7. Floodplain values will be considered in the sizing of the structure over the Little Gunpowder. The existing structure is above the 100 year storm elevation. The replacement structure would be constructed at or above the existing elevation, thus minimizing impacts to the 100-year floodplain.
8. This has been corrected in the FEIS. See p. III-28 and Appendix IX-2.

- 9. An Environmental Map was provided in the DEIS (p. III-50). This map has been revised to show additional natural features.
- 10. This information has been provided in the FEIS.
- 11. More information regarding stream characteristics is provided in the FEIS. Because the majority of the streams within the study corridor are small, unnamed tributaries, little or no specific information is available on them.
- 12. The stream classifications have been added to the FEIS where applicable.
- 13. Coordination with DNR will be conducted prior to rock excavation.
- 14. The figure of 60,000 ADT is for those sections of the highway in urban areas. For that section of U.S. 1 that passes through park areas and across the major streams of concern the ADT is predicted to be 43,000 vehicles per day. The studies that were cited in the narrative provided information regarding potential effects. The Winters and Gidley (1980) study looked at a highway system with 185,000 vehicles per day and the study by Portele et al. (1982) was based on bioassays. Due to the natural variation found in stream systems caution must be followed in applying these laboratory results to field conditions. Further, the dilution factors in the table on page IV-22 (FEIS page IV-15) range from .0001 to .0027, several orders of magnitude greater than that which is usually recommended (.01 or 100:1). Measures will also be used to mitigate the runoff from the highway. Measures utilized to mitigate the runoff from the highway are described on Page IV-15.
- 15. The Big Gunpowder Falls bridge will be replaced with five-celled, bottomless arches. This type of structure has a

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"natural" bottom and provides unencumbered fish passage. The Little Gunpowder Falls bridge will be studied in final design to determine the type of structure to be used. A box culvert is currently used to carry U.S. Route 1 over Wild Cat Branch. Current plans call for an extension of this existing box culvert for the widening of U.S. Route 1; however, other types of structures will be investigated during final design. The stream near the Gunpowder Falls mainstream will be completely avoided.

16. The use of jersey barriers throughout this project will adversely affect vehicular access. SHA is now proposing the use of 16 foot grassed medians instead of the jersey barrier and has deleted the 7 foot shoulders. A closed typical section will be used throughout the project area, within the same right-of-way.
17. The loss of habitat will be partially mitigated by the replacement of parkland taken by the project. These replacement areas will be protected from urban development.
18. With the use of proper controls and consideration of the prior responses to comments 1, 2, and 14 their potential impacts will be minimized for the Build Alternative.
19. Under present requirements, the maintenance of stormwater management facilities is the responsibility of SHA. These facilities are currently inspected by the Construction Inspection Division and appropriate maintenance is undertaken as required. This maintenance improves the overall water quality and, therefore, has a positive effect on aquatic ecosystems.



PROJECT DEVELOPMENT DIVISION
 312
 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION III JAN 20 8 11 AM '89
 841 Chestnut Building
 Philadelphia, Pennsylvania 19107

JAN 19 1989

Mr. Louis H. Ege, Jr., Deputy Director
 Project Development Division (Room 506)
 State Highway Administration
 707 North Calvert Street
 Baltimore, Maryland 21202

Re: U.S. Rt. 1 from Silver Spring Rd. to
 MD Rt. 152 Baltimore County and Harford
 County, MD (88-11-122)

Dear Mr. Ege:

In accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, EPA has reviewed the Draft Environmental Impact Statement (DEIS) for the above referenced project. We have rated the project EC-2 on EPA's rating scale, a copy of which is enclosed for your reference. The following comments are provided for your consideration in the Final Environmental Impact Statement (FEIS).

Alternatives Analysis

Although reasons are given for the elimination of the Four Lane Alternative, we believe that it should have been discussed in greater detail in the DEIS. For example, the level of service (LOS), projected accident rate and environmental impacts of this alternative should be presented in comparison to the Selected Alternative in the FEIS. ①

In addition, the intersection of Route 1 and Silver Spring Road have LOS F in the design year. If right-of-way constraints preclude consideration of an interchange at this intersection (p. IV-16), other means to prevent a breakdown in the transportation network at this intersection should be discussed. ②

The FEIS should state whether the proposed projects described on page III-17 and Table I-7 are included in the level of service (LOS) and traffic projections for Route 1. ③

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In addition, it would be helpful to provide a detailed map of the study area in relation to these planned networks, including the major origin and destination points of commuters on Route 1.

④

The Baltimore County and Harford County Master Plans designate Kingsville and the area between Little Gunpowder Falls and Route 152 as agricultural/rural residential. Therefore, it is not clear from the DEIS why the average daily traffic on Route 1 north of Gunpowder Falls is expected to more than double by 2015. In a conversation with Lynn Rothman (EPA), January 11, 1989, Paul Wettlaufer (FHWA) explained that much of this traffic originates in Bel Air, which is a designated growth area, north of the study area. We suggest that this information be provided in the FEIS for clarification. It would also be informative to discuss whether the expansion of Route 1 will put development pressures on these low growth areas adjacent to Gunpowder Falls State Park.

⑤

Kingsville Option F has the least impact on business buildings and businesses, although it has the greatest impact on wetlands and habitat (man dominated, hardwood forest, abandoned field and shrub habitat; page IV-28). Based on the information presented, Option E has the fewest impacts to the natural environment and man dominated habitat. Although it displaces more business than Option F, Option E has fewer business impacts than Option B, making it the preferred Option.

⑥

Water Quality

All impacted wetlands should be replaced in kind, on at least a 1:1 ratio. Potential sites for wetland mitigation should be identified in the FEIS. Furthermore, a mitigation site, mitigation plan and implementation schedule should be completed by the commencement of the 404 permit review period.

⑦

In addition, it is confusing that the total area given for some of the wetlands is less than the encroachment by the Build Alternative. For example, the encroachment for KFW-1 is 0.1 acres, while the total area is 0.005 acres.

⑧

The FEIS should state whether the crossing of Little Gunpowder Falls is a single span structure. Note that instream work should be avoided to the greatest extent possible. Any time of year restrictions on construction

⑨

should be coordinated with the National Marine Fisheries Service and the Maryland Department of Natural Resources, Tidewater Administration. Blasting in the vicinity of the river crossings may also impact aquatic life and these agencies should be consulted in this regard.

The FEIS should confirm that there are no wells within, or on the perimeter of, the right of way. ⑩

Noise

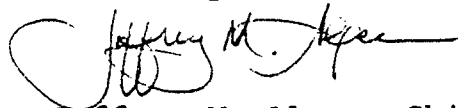
Noise Sensitive Area (NSA) 15 represents Big Gunpowder Falls State Park. The "cost per residence" at this site (based on 1 residence per 100 feet of park property) exceeds the economic criteria. If possible, the FEIS should address whether it is economically feasible to mitigate noise impacts on one side of the road, or if there is a less expensive material with which to construct a noise wall/berm. ⑪

NSA 3, a residence on Little Gunpowder Falls State Park property, shows a Build noise level of 70 dBA. Based on the one residence that would be offered mitigation, a noise barrier is not cost effective at this site. Yet EPA recommends that the parkland in the area be considered for noise abatement, and included in the economic feasibility analysis. ⑫

EPA would also like to commend SHA on their coordination with the Citizens Advisory Committee and the incorporation of the Committee's recommendations in the design of the alternative.

Thank you for allowing EPA the opportunity to review this document. Should you have any questions, or if we can be of further assistance, please contact Lynn F. Rothman at 215-597-7336.

Sincerely,



Jeffrey M. Alper, Chief
NEPA Compliance Section

Enclosure

cc: Mr. Herman Rodrigo, FHWA

SUMMARY OF RATING DEFINITIONS
AND FOLLOW-UP ACTION*Environmental Impact of the Action

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at the draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment.

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RESPONSE TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY

1. The LOS information has been added to the Section 4(f) Evaluation (Section V-D). The accident rate for the Four-Lane Alternate has been estimated to be 356 accidents per 100 million vehicle miles (compared to 302 accidents per 100 vehicle miles for the Six-Lane Alternate). A detailed analysis of environmental impacts was not conducted for the Four-Lane Alternate; however, a preliminary environmental assessment was conducted for the Four-Lane Alternate prior to the Public Alternates Meeting in April, 1987.
2. The intersection of U.S. Route 1 and Silver Spring Road is currently very heavily developed. An interchange at this location would probably relocate at least four (4) businesses and four (4) residences and severely affect the customer parking areas at two (2) large shopping centers. Widening of the roadways to provide the maximum feasible cross section (four thru lanes, double left, and right turn lanes) would provide a L.O.S. F during the evening peak hour in the 2015 design year. Flyover ramps or other grade-separated configurations have not been studied; however, severe relocation impacts would probably also control in these cases.
3. These projects are included in the LOS and traffic projections for U.S. Route 1. This is stated in the FEIS on page III-15.
4. A map showing planned transportation improvements has been added to the FEIS (See Figure III-6). U.S. Route 1 provides a primary connection between the growing communities of Bel Air, Fallston, Kingsville, Perry Hall and Whitmarsh to the Baltimore Beltway (with primarily western destinations) and the City of Baltimore (south on U.S. Route 1).

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5. This discussion has been added to the FEIS (See Section IV-A.5).

6. Kingsville Option F was developed in response to public comments regarding the sense of disruption of neighborhoods associated with the widening of U.S. Route 1 through Kingsville. The previous options (including Options B and E Modified) essentially widened the existing facility from 44 feet to 106 feet holding the existing eastern edge of pavement. These options required the relocation of buildings strongly identifiable with the Kingsville community, including the Kingsville Pharmacy and the Kingsville Shopping Center. Option 'F' provides a partial bypass of Kingsville and avoids taking these community facilities; however, since it uses an alignment outside the developed area, it does involve more (10 acres \pm) habitat loss. This is, admittedly, a trade-off between natural values and community disruption.

7. All impacted wetlands will be replaced on a 1:1 ratio. Potential mitigation sites have been identified by SHA. These potential sites are located on SHA property adjacent to Gunpowder Falls State Park. The feasibility of using this site will be investigated during final design. The mitigation site, mitigation plan and implementation schedule will be developed for the 404 permit application.

8. This discrepancy has been corrected in the FEIS. See Table IV-4.

9. The feasibility of a single span structure for the Little Gunpowder Falls will be investigated during final design. Instream work will be avoided to the greatest extent possible. Blasting will be coordinated with DNR and other agencies.

10. As discussed on page III-5, the portion of the study corridor north of Perry Hall is not served by public water and sewer. It is assumed, therefore, that every developed property north of Perry Hall has an operational well and septic system. The actual locations of each well and septic tank will be determined during final design. Those systems affected by this project will be replaced.

11. These discussions have been added to the FEIS in Section IV-E.

12. An analysis considering the parkland has been added to the FEIS in Section IV-E.



Maryland Department of Natural Resources

PROJECT DEVELOPMENT

319

Capital Programs Administration
2012 Industrial Drive
Annapolis, Maryland 21401

JAN 12 1989

William Donald Schaefer
Governor

Torrey C. Brown, M.D.
Secretary

Michael J. Nelson
Assistant Secretary
for Capital Programs

January 9, 1989

Mr. Louis H. Ege, Jr.
Deputy Director
Project Development Div., Room 506
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

RE: Draft Environmental Impact Statement/
Section 4(F) Evaluation Contract No.
B 813-101-471

Dear Mr. Ege:

The Department of Natural Resources, Capital Programs Administration has reviewed the above referenced Draft EIS. Our comments are as follows:

This document discusses impacts and mitigations for Gunpowder Falls State Park at crossings of both the Big Gunpowder River and the Little Gunpowder River. The discussion on pages IV-6 to IV-11 for the road and bridge replacement at the Big Gunpowder River is consistent, in a general way, with coordination efforts between S.H.A. and D.N.R. However, the discussion of the road crossing at the Little Gunpowder River in the Section 4(f) Evaluation on pages V-1 thru V-6 does not include input from D.N.R. The Mitigation Measures on page V-5 does not include D.N.R. concerns for park trails crossing the road and bridge and trail access. Additional mitigations should be developed in cooperation with D.N.R.

In the summary of impacts table on page S-7 and in the Public Hearing brochure only six acres of park land at Little Gunpowder are shown. The 8 acres of park land at the Big Gunpowder is omitted.

Telephone: _____

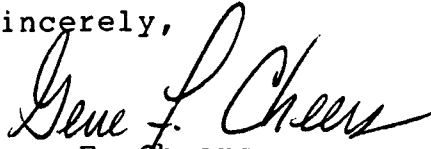
DNR TTY for Deaf: 301-974-3683

320

Ege, Louis H.
January 9, 1989
Page No. 2

If you have any questions concerning these comments please
feel free to contact me.

Sincerely,



Gene F. Cheers
Chief, Capital Programming
and Environment Review

GFC:mcs

cc: Michele A. Hoffman, WRA
(Waterway Permits Div.)

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RESPONSE TO DNR CAPITAL PROGRAMS ADMINISTRATION

1. Additional mitigation recommendations have been developed in cooperation with DNR. They have been added to the FEIS.

2. The Big Gunpowder Falls bridge replacement is a separate project that is being constructed in advance of the U.S. Route 1 improvement. All costs and impacts were separated from the DEIS. FHWA, however, has determined that the Big Gunpowder crossing should be completely evaluated in the FEIS as a Section 4 (f) resource. The bridge replacement project at the Big Gunpowder, therefore, has been incorporated in the FEIS.



BALTIMORE COUNTY POLICE DEPARTMENT

HEADQUARTERS

400 KENILWORTH DRIVE
TOWSON, MARYLAND 21204-4007
(301) 494-2214

506
DEVELOPMENT
DIVISION
JAN 3 9 50 AM '89
322

Cornelius J. Behan
CHIEF OF POLICE

December 23, 1988

Mr. Louis H. Ege, Jr., Deputy Director
Project Development Division, Room 506
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

Dear Mr. Ege:

This is in response to your request for our review of the draft Environmental Impact Statement/Section 4(F) Evaluation.

The project booklet has been thoroughly reviewed to determine the impact on police service and public inconvenience. Our opinion is that the proposed project is much needed and should not present any specific difficulties in either police service or public safety.

This proposed redesign is a project that when completed, will assure the safe and expeditious movement of traffic through the Belair Road corridor. Lieutenant Michael Stelmack, #1735, Commander of the Area II Traffic Command will prepare his personnel to assist the Maryland State Highways Administration with traffic control for this project to ensure the successful and safe conclusion of the redesign of Belair Road.

If you have any further questions or need any future assistance, you may contact Captain James Yeasted, #1977, Commander of the Traffic Division. You may reach him at 887-7290.

Sincerely,

Michael D. Gambrell
Colonel
Field Operations Bureau

MDG:smc





PROJECT
DEVELOPMENT
DIVISION

DEC 20 2 10 PM '88

723
U.S. Department of Housing and Urban Development

Philadelphia Regional Office, Region III
Liberty Square Building
105 South Seventh Street
Philadelphia, Pennsylvania 19106-3392

DEC 21 1988

Mr. Louis H. Ege, Jr.
Deputy Director
Project Development Division
State Highway Administration
707 North Calvert Street, Room 506
Baltimore, MD 21202

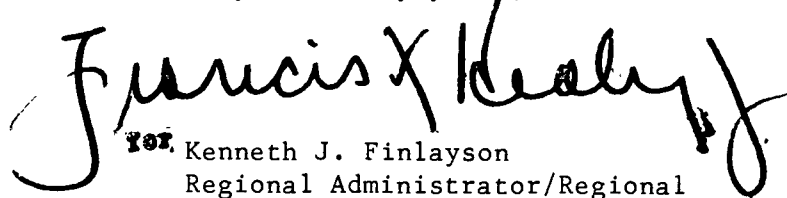
Dear Mr. Ege:

We have reviewed the Draft Environmental Impact Statement/Section 4(F) Evaluation for proposed alterations to U. S. Route 1 from Silver Spring Road to Maryland 152, Contract No. B 813-101-471, PDMS No. 032115.

We did not identify any HUD-assisted or insured activities in the study area. It does not appear that any of the build options is preferable in terms of noise impact. It does appear that you are giving appropriate consideration to minimizing relocation of households.

We have no further comment or recommendations on this document. Thank you for providing us with the opportunity to review it.

Very sincerely yours,


for Kenneth J. Finlayson
Regional Administrator/Regional
Housing Commissioner

PROJECT
DEVELOPMENT
DIVISION

Dec 21 11 33 AM '88



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

324

Management Division
Habitat Conservation Branch
Oxford, Maryland 21654

December 20, 1988

Louis H. Ege, Jr., Deputy Director
Project Development Div. (Room 310)
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Ege:

The National Marine Fisheries Service has reviewed the Draft Environmental Impact Statement (EIS) for upgrading U.S. Route 1 (from Silver Spring Road to Maryland Route 152), including bridge replacement over the Big and Little Gunpowder Falls, in Baltimore and Harford Counties, Maryland.

Big Gunpowder Falls and its tributary, Broad Run, which flows through Wetland 11, are documented spawning and nursery habitat for four species of anadromous and semi-anadromous fish: the alewife (Alosa pseudoharengus), blueback herring (Alosa aestivalis), white perch (Morone americana), and yellow perch (Perca flavescens) (O'Dell et al., 1975). Additionally, riparian wetlands associated with these watersheds are critical to the reproductive success of these species, as well as to the ecological health of each stream system. ①

While the preferred project design will reduce wetland impacts by generally following the horizontal alignment of the existing roadway, wetland fill can be minimized further by reducing corridor width within all wetland crossings. For example, page IV-25 of the EIS states that "where practical, jersey barriers will be used in order to reduce the right-of-way impacts". Therefore, using jersey barriers with 1.5:1 slopes (as will be constructed within the crossings of Gunpowder Falls State Park, and Wetlands 3, 4, 6, 7, and 8), should also be used at the crossings of Wetlands 1, 2, 9, and 11. ②

Finally, the EIS should address specific measures that will ensure no disruptions to fish reproductive activities during and following project construction. To this end, we recommend that:

1. Instream construction at Big Gunpowder Falls and Broad Run should be prohibited from February 15 to June 15. ③
2. Culverts (existing and proposed) associated with all tributary stream crossings of U.S.1 should be made passable to fish by constructing them 1 foot below existing stream bottom, and by providing a low-flow channel. ④



325

If there are any questions concerning these comments, you may call John S. Nichols, (301) 226-5771.

Sincerely,

Timothy E. Godger
for Edward W. Christoffers
Assistant Branch Chief

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LITERATURE CITED

1. O'Dell, Jay, J.J. Gabor, and R. Dintaman. 1975. Survey of Anadromous Fish Spawning Areas. Completion Report, Project AFC-8, for: Potomac River and Upper Chesapeake Bay Drainages. Maryland Dept. of Natural Resources, Fisheries Admin.

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RESPONSE TO NATIONAL MARINE FISHERIES SERVICE

1. Broad Run is a tributary of Big Gunpowder Falls; however, it does not flow through Wetland 11 (eleven) but lies outside the study area to the east. The species mentioned have been added to the list of fish expected to occur within the study area.
2. Use of a Jersey barrier throughout the project would have an adverse impact on access. Use of 1.5:1 slopes will be considered where engineering conditions permit. SHA is now proposing a 16 foot landscaped median throughout the corridor to improve the aesthetics of the project (see Section IV-6). The 7 foot shoulders have been deleted; however, the right-of-way requirements remain the same.
3. Instream construction at Big Gunpowder Falls will be prohibited from March 1 to June 15. Broad Run lies outside the study area.
4. To the extent feasible, culvert extensions associated with fish-bearing streams (Gunpowder Falls, Little Gunpowder Falls, Rocky Branch and Wildcat Branch) will be provided passable channels.

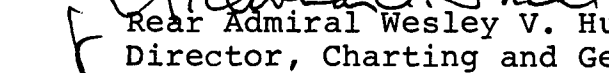


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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF CHARTING AND GEODETIC SERVICES
ROCKVILLE, MARYLAND 20852

DEC 15 1988

MEMORANDUM FOR: David Cottingham
Ecology and Environmental Conservation Office
Office of the Chief Scientist

FROM: 
Rear Admiral Wesley V. Hull, NOAA
Director, Charting and Geodetic Services

SUBJECT: DEIS 8811.14 - U.S. Route 1, Silver Spring Road
to Maryland Route 152, Maryland

The subject statement has been reviewed within the areas of Charting and Geodetic Services' (C&GS) responsibility and expertise and in terms of the impact of the proposed actions on C&GS activities and projects.

A preliminary review of C&GS records has indicated the presence of no geodetic control survey monuments in the immediate vicinity of the proposed project area.

For further information about survey monuments adjacent to the project area, please contact the National Geodetic Information Branch, N/CG17, Rockwall Bldg., room 20, National Geodetic Survey, NOAA, Rockville, Maryland 20852, telephone 301-443-8631.

cc:
N/CG17 - Spencer
N/CG1x25 - Poust

DEC 19 1988
RECEIVED





328

JUDGE SOLOMON LISS
CHAIRMAN

STATE OF MARYLAND
CHESAPEAKE BAY CRITICAL AREAS COMMISSION
DEPARTMENT OF NATURAL RESOURCES
TAWES STATE OFFICE BUILDING, D-4
ANNAPOLIS, MARYLAND 21401
974-2418 or 974-2426

SARAH J. TAYLOR, PhD
EXECUTIVE DIRECTOR

COMMISSIONERS

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December 1, 1988

Mr. Neil J. Pedersen
Director
Office of Planning & Preliminary Engineering
Maryland Department of Transportation
State Highway Administration
707 N Calvert Street
Baltimore, Maryland 21203-0717

Re: Contract No. B 813-101-471
U S 1 Silver Spring Road to MD
152-PDMS No. 032115

Dear Mr. Pedersen:

This is to acknowledge receipt of the DEIS/Section 4 (F) Evaluation on the above referenced project which was conveyed to us by your letter of November 23, 1988.

The staff of the Chesapeake Bay Critical Area Commission will review the DEIS for compliance with COMAR 14.19.

Sincerely,

Sarah J. Taylor
Sarah J. Taylor, Ph.D.
Executive Director

CABINET MEMBERS

- Wayne A. Cawley, Jr.
Agriculture
- J. Randall Evans
Employment and Economic Development
- Marion Vaisn, Jr.
Environment
- Ardaith Cade
Housing and Community Development
- Torrey Brown
Natural Resources
- Christiane Lieder
Planning

SJT/jjd

cc: Mr. Ren Serey
bcst

RECEIVED
DEC 1 1988



U.S. Department
of Transportation

**Urban Mass
Transportation
Administration**

330
841 Chestnut Street
Suite 714
Philadelphia, PA 19107

Mr. Neil J. Pedersen
Director
Office of Planning and
Preliminary Engineering
State Highway Administration
Maryland Department of Transportation
707 North Calvert Street
Baltimore, Maryland 21203

29 November 1988

Re: U.S. Route 1
Draft Section 4(f) Statement

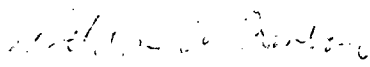
Dear Mr. Pedersen:

We are in receipt of your letter of November 23, 1988 requesting our review of the enclosed Draft Environmental Impact Statement/Section 4(f) Evaluation entitled U.S. Route 1 From Silver Spring Road to Maryland Route 152. It describes the reconstruction of U.S. Route 1 from Silver Spring Road in Baltimore County to Maryland Route 152 in Harford County.

Based on our review we find there are no significant mass transit issues and we have no comments on the proposed project.

Should you need additional information please contact Alfred Lebeau who can be reached on (215) 597-4179.

Sincerely,


Sheldon A. Kinbar
Regional Manager



Maryland Department of Natural Resources

Maryland Geological Survey
2300 St. Paul Street
Baltimore, Maryland 21218 (301) 554-5500
Telephone: _____

PROJECT DEVELOPMENT 324

JAN 25 1989

William Donald Schaefer
Governor

Division of Archeology
(301) 554-5530

25 January 1989

Torrey C. Brown, M.D.
Secretary

Kenneth N. Weaver
Director

Emery T. Cleaves
Deputy Director

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

RE: MHT Review Comments on
US 1 from Silver Spring Road to MD 152
Contract No. B 813-101-471

Dear Mr. Ege:

As per your request of 28 September 1988, we have reviewed the 1 September 1988 letter from the Maryland Historical Trust concerning the executive summary of the archeological survey of the subject project. The Trust raises two issues: the use of the term "artifact scatter," and the treatment of archeological resources associated with standing structures.

In the particular instance cited in the Trust's letter, both 18BA336 and 18BAX206 produced few artifacts under similar testing regimes; however, 18BA336 was given a site number rather than an artifact scatter number because, in the judgement of the field archeologist (Ervin), extensive grading there created doubts about 18BA336's original character. It may have been a site from which much had been removed by grading, rather than a severely disturbed scatter. In the case of 18BAX206, it was the judgement of the field archeologist that the site was small and dispersed, even before the onset of construction activity.

We concur with the Trust's concern that historic archeological resources associated with standing structures be considered in archeological surveys and sampling strategies. In order to determine which sites are

potentially significant in a project area, it would be helpful to have a map of already inventoried standing structures, along with their age, a history of earlier structures on the property, and the Maryland Structure Inventory Number. Since standing structures are already being inventoried by the Environmental Management Section, considerable duplication of effort could be avoided if we were to receive copies of these studies and relevant associated materials (such as copies of the Trust's standing structure survey forms) prior to our beginning a Phase I survey project. In this way, we can efficiently pursue our goals of archeological survey, and meet the Trust's concerns.

Sincerely,



Ira Beckerman

IB: cab

cc: Cynthia Simpson
Rita Suffness

VII.D. WRITTEN STATEMENTS

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

PROJECT
DEVELOPMENT
DIVISION

334

CONTRACT NO. B 813-101-471
U.S. ROUTE 1
SILVER SPRING ROAD
TO
MARYLAND RTE 152

JAN 3 3 44 PM '89

COMBINATION LOCATION / DESIGN PUBLIC HEARING
DECEMBER 8, 1988

NAME Royce Williams DATE _____

PLEASE
PRINT

ADDRESS 1306 Continental Drive

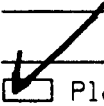
CITY/TOWN Abingdon STATE Md. ZIP CODE 21009

I/We wish to comment or inquire about the following aspects of the project:

Status of 8843 Belair Road
As to Acquisition or Condemnation

Formula for determining value of
property -

Time frame for acquisition or
condemnation.



Please add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

VII.D-1

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.



Maryland Department of Transportation
State Highway Administration

335
Richard H. Traino
Secretary
Hal Kassoff
Administrator

March 1, 1989

RE: Contract No. B 813-101-471
U.S.1 - Silver Spring Road to
MD 152
PDMS No. 032115

Mr. Roger P. Williams
1306 Continental Drive
Abingdon, Maryland 21009

Dear Mr. Williams:

Thank you for your comments regarding the Belair Road project. Your name has been added to the project mailing list as you requested and you will be kept informed as the project progresses.

A portion of Belair Road, approximately one mile in length, from Miller Road to Sheradale Drive is currently under final design. This portion is funded for right-of-way acquisition and construction. Right-of-way acquisition for this segment is scheduled to begin this year.

The rest of the project is not funded for construction at this time; however, the segment from Silver Spring Road to Pinedale Drive is funded for right-of-way acquisition. The acquisition is scheduled to begin in 1991. The other portions of this project are not funded for right-of-way acquisition at this time.

I am enclosing a brochure called "Your Land and Your Highways" for your information. This brochure will explain the steps in acquiring properties for highway projects. Fair market value will be paid for properties that will be acquired. If you

VII.D-2

My telephone number is (301) 333-1138

336

have any further questions regarding this matter, please contact Mr. Robert Tresselt, Chief, Right-of-Way for our District #4 Office at Brooklandville. Mr. Tresselt's telephone number is (301) 321-3400.

Very truly yours

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Sue Rajan

Sue Rajan
Project Manager

LHE:SR:ds
Attachment

cc: Mr. C. R. Olsen (W/Incoming)
Mr. C. E. Utermohle " "
Mr. R.H. Tresselt " "

337

STATE HIGHWAY ADMINISTRATION PROJECT DEVELOPMENT
QUESTIONS AND/OR COMMENTS

CONTRACT NO. B 815-101-471
U.S. ROUTE 1
SILVER SPRING ROAD
TO
MARYLAND RTE 152

FEB 15 10 04 AM '89

COMBINATION LOCATION / DESIGN PUBLIC HEARING
DECEMBER 8, 1988

NAME Phyllis Waldner DATE Feb. 10, 1989

PLEASE PRINT

ADDRESS 4139 Whittlesey Avenue
CITY/TOWN Baltimore STATE Md. ZIP CODE 21236

I/We wish to comment or inquire about the following aspects of the project:

I am interested in all phases and aspects
of this project and how they will
impact Perry Hall and Kingsville.

- Please add my/our name(s) to the Mailing List.*
- Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.



Maryland Department of Transportation
State Highway Administration

338
Richard H. Trainor
Secretary
Hal Kassoff
Administrator

March 1, 1989

RE: Contract No. B 813-101-471 (N)
US 1 from Silver Spring Road
to MD 152
PDMS No. 032115

Ms. Phyllis Waidner
4139 Whittlesey Avenue
Baltimore, Maryland 21236

Dear Ms. Waidner:

Thank you for your recent comments regarding the U.S. 1 project from Silver Spring road to MD 152.

No final decision on this project has been made. We anticipate receiving location/design approval for this project by the spring of this year. Currently, only the portion from Miller Road to Sheradale Drive is funded for construction, which is scheduled to begin in 1990. Even if we receive location/design approval for the entire length of the project, it will be constructed in stages. The first stage will be from Silver Spring Road to Pinedale Drive. Subsequent Phases of this project will be built as the traffic need occurs, and in consultation with the local elected officials.

As you requested over the telephone, we have also mailed you a copy of the Six Lane Alternate in the vicinity of Honeygo Boulevard.

Your name has been added to the project mailing list and you will be kept informed as the project progresses.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: *Sue Rajan*

Sue Rajan
Project Manager

LHE:SR:ds

cc: Mr. C. R. Olsen
Mr. C. E. Utermohle

VII.D-5

My telephone number is (301) 333-1138

HEATHCOTE Lawn & Garden Center



339
Phone: 592-9013

12301 BEL AIR ROAD • KINGSVILLE, MARYLAND 21087

December 19, 1988

Maryland Department of Transportation
State Highway Administration
Office of Planning and Preliminary Engineering
Box 717
Baltimore, MD 21203

This letter is in reference to the proposed changes to Belair Rd. in the Kingsville area.

I attended the public hearing on December 8 and gave verbal testimony to the Court Reporter on hand. This is to follow up that testimony.

According to the current proposal there is to be a crossover located $\frac{1}{4}$ mile south of New Cut Rd. for large vehicles. At this crossover southbound traffic will be prohibited from making a U turn. I am proposing to make a crossover directly in front of my business, Heathcote Lawn & Garden Center. The nature of my business necessitates receiving machinery in large tractor trailers (40 ft. trailer & 10 Ft. tractor). As the road exists today, these vehicles take 3 - 4 lanes to make the turns in and out of Heathcote. A study has been made already for a similar business affected by Phase I of the Belair Rd. widening (Value Equipment) and provisions have been made to accomodate such vehicles. I feel that it is justifiable to have the same provisions made for my business.

A crossover as I propose would not only benefit my business, but would provide an area for U turns for all the residences south of New Cut Road, thereby saving them a 2 mile trip to get into their homes coming southbound. The roadway in front of Heathcote is a very level stretch of road with a good sight distance in both good and bad weather.

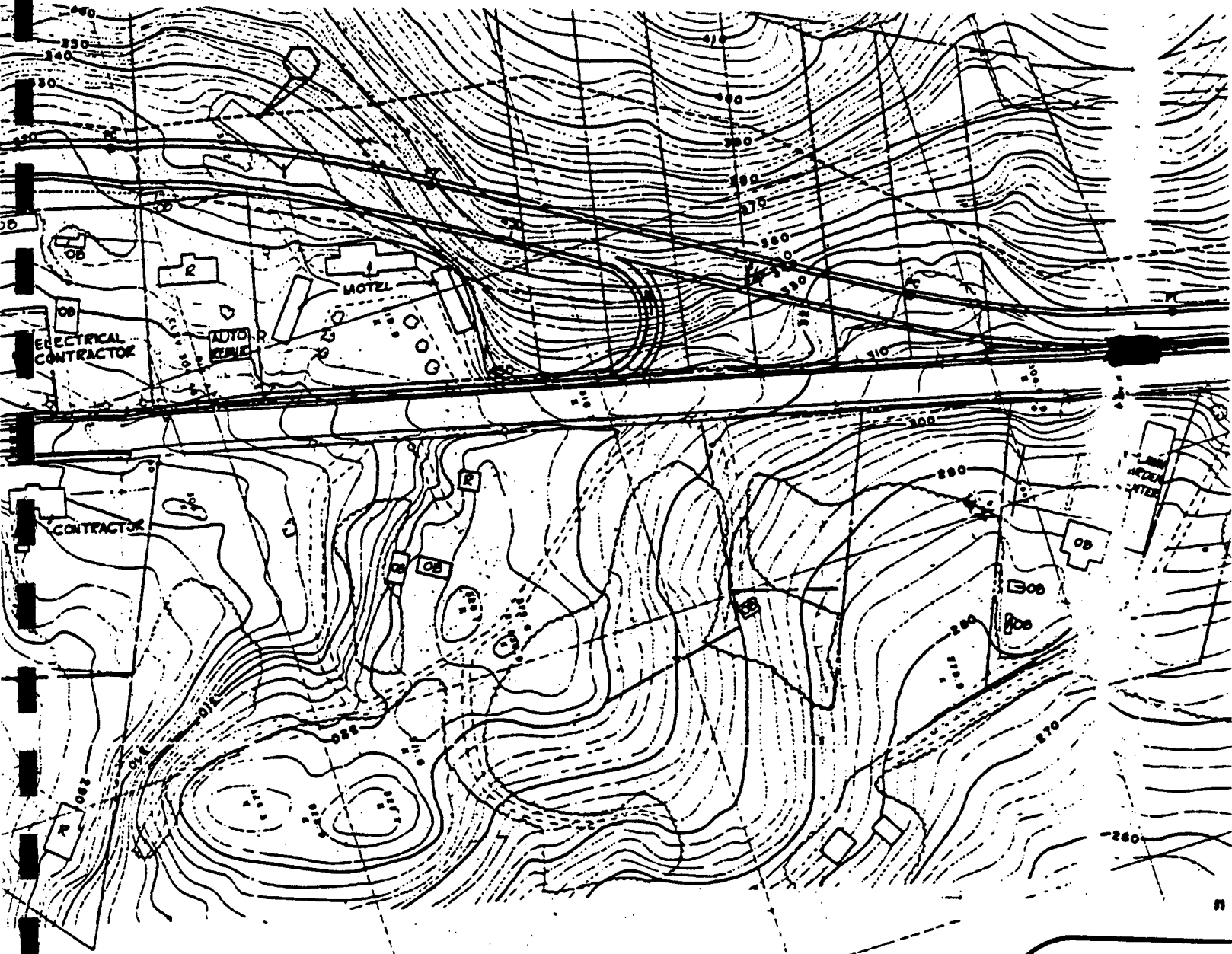
I have obtained maps FigureII-11 andII-12 from Ms. Sue Raj n, the Project Manager and enclose them illustrating the change I propose. Thank you for your consideration.

Sincerely,


Kyrle W. Preis, Jr.

KWP/dp
Enc.

VII.D-6



Legend:

 Proposed Crossover

BELAIR
SILVER SPRING
6 LAN
 0 100 200
NOVEMBER



**Maryland Department of Transportation
State Highway Administration**

341

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

January 12, 1989

Mr. Kyrle W. Preis, Jr.
Heathcote Lawn & Garden Center
12301 Belair Road
Kingsville, Maryland 21087

Dear Mr. Preis:

Thank you for your December 19th letter concerning the Belair Road project.

Under our current proposal for the Six Lane Alternate, a crossover will be provided at approximately 1/4 mile south of New Cut Road. At this crossover, additional widening of pavement on the east side will be provided to enable large vehicles such as school buses to make U-turns from the southbound roadway. Other vehicles will also be allowed to make U-turns at this location. However, large vehicles will not be able to make U-turns from the northbound roadway at this location. No additional widening of the pavement is provided on the west side due to the adjacent stream.

We have taken a look at providing a crossover in front of your business. Because of the steep slope on that side of the roadway, we feel that it is not safe to provide a crossover at that location without regrading your driveway and the roadside to make a provision for U-turns. We will continue to investigate your proposal and, if we find it is feasible, a change could be made during final design.

If you have any questions or wish to further discuss this matter, please feel free to contact me or Ms. Sue Rajan, the Project Manager for this project. Sue's telephone number is (301) 333-1138.

Thank you again for your comments and suggestions.

Very truly yours,

Neil J. Pedersen
Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

NJP:ds

cc: Mr. C. Robert Olsen (w/attach)
Mr. Louis H. Ege, Jr. (w/attach)
Mr. Charles E. Utermohle (w/attach)

VII.D-8

My telephone number is (301) _____



HARFORD COUNTY GOVERNMENT

342

January 12, 1989

RECEIVED

JAN 17 1989

#665

DIRECTOR, OFFICE OF
PLANNING & PRELIMINARY ENGINEERING

Mr. Neil J. Pedersen
Director, Office of Planning and
Preliminary Engineering
State Highway Administration
707 N. Calvert Street
Baltimore, Maryland 21203-0717

Re: Contract No. B-813-101-471(N)
U.S. 1 from Silver Spring Road to
MD 152

Dear Mr. Pedersen:

After review of the above project, we offer the following comments for your consideration.

1. Harford County supports the six lane modified alternate for the segment within Harford County. We support a six lane divided section from the County line to Reckord Road and the six lane divided section from Reckord Road to Maryland 152.
2. We support the interim improvements proposed for the U.S. 1 and Maryland 152 intersection. The improvements are necessary in order to increase safety and reduce congestion.

If you have any questions, please contact this office directly.

Sincerely,

William G. Carroll
Director of Planning

Thomas F. Smith, P.E.
Director of Public Works

WGC/TFS/JS/jw

cc: Habern Freeman
Stoney Fraley
James Smedley
Martha Campbell
Jerry Wheeler
Charles Goodman, RPC

VII.D-9



Maryland Department of Transportation
State Highway Administration

343
Richard H. Trainor
Secretary
Hal Kassoff
Administrator

February 6, 1989

Mr. William G. Carroll,
Director of Planning
Mr. Thomas F. Smith, P.E.,
Director of Public Works
Harford County Government
220 South Main Street
Bel Air, Maryland 21014-3865

Dear Messrs. Carroll and Smith:

Thank you for your January 12th letter informing us of Harford County's support for a six lane divided section from the County line to MD 152. The County's support for the interim improvements proposed for the intersection of US 1 and MD 152, has also been noted.

A concrete median barrier was originally proposed for the six lane section through the park area. A six lane divided section with a 16 foot raised grass median is currently being considered for this area.

Your letter will be included in the public hearing record and your comments and suggestions will receive serious consideration during the final decision making process for this project.

We look forward to your continued interest in this project.

Very truly yours,

Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

NJP:ds

Harford County Senators and Delegates (w/incoming)
Mr. C. Robert Olsen
Mr. Louis H. Ege, Jr.
Mr. Charles E. Utermohle

VII.D-10

My telephone number is (301) _____

GREATER MT. VISTA ASSOCIATION
18 Vista View Court
Kingsville, Maryland 21087
(301)592-2723

344

December 12, 1988

RECEIVED

DEC 14 1988

Mr. Neil J. Pedersen, Director
Office of Planning and Preliminary Engineering
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

DIRECTOR, OFFICE OF
PLANNING & PRELIMINARY ENGINEERING

RE: U.S. Route 1
Silver Spring Road to
Maryland Route 152
Contract #B 813-101-471

Dear Mr. Pedersen:

There are several items that I would like to discuss due to the fact that our association represents many residents in Kingsville and some surrounding areas. First, I would like to be placed on the mailing list for any information pertaining to the above referenced project.

We would also like to state that we feel that you and your group are doing a very good job with all of the problems that naturally occur in a situation like this, and we agree that Route 1 has to be improved and expanded to handle the traffic. Because of the mass amount of traffic that is commuting from the suburbs into the city, not only has Belair Road had problems, but many secondary roads are becoming overwhelmed as people look for alternate routes to avoid the Belair Road congestion. Naturally, Harford Road is one road that has been hard hit with this commuting traffic.

The facts are that we agree with Route 1 widening and alignment, but we strongly oppose altering Harford Road. Route 1 has become the commercial property strip and Harford Road has remained the residential and agricultural strip. Route 1 is in place and everything funnels to it, while Harford Road does not have this capability.

Relative to the Kingsville options, we like option "F" the best and feel that its appearance and safety factors are the best for Kingsville. In general, we feel this route should be the beginning of a new era in highway and roadway planning and we do not want Belair Road to look like the expressways of nowadays.

We like where you have placed grass strip medians between the north and southbound lanes. We also strongly encourage that wherever Jersey barriers have to be that colored concrete with vertical "V" ridges or some form of an abstract approach be taken. Nothing looks worse in a residential, commercial, and "people" area than straight, white, concrete Jersey walls.

We also feel that this is a good time to start thinking about roads that have much longer life spans. The technology and long term

343
Mr. Neil J. Pederson
December 12, 1988
Page 2


value of a reinforced concrete road far surpasses the blacktop roadway. These days of air-entrained concrete, water reducing admixtures, plasticizers, and post-tensioning cables or epoxy coated reinforcing gives the long-term value as opposed to the blacktop "looks good today" syndrome. Also, the visibility of the concrete roadway in bad weather is much better than the blacktop.

We will not speak nor can we speak for the Perry Hall area residents but in what we see planned for Kingsville, and even the pattern and layout currently proposed to Route 152, we feel you are doing a very good job at face value.

A personal point to note is that I think that you have done a good job in your planning of the Little Gunpowder River to Reckord Road insofar as road alignment, elevations, etc. I work in the area and I can see a much improved safety factor on entering existing Reckord Road and for entering existing property in the area from Reckord Road toward the Gunpowder Falls (near the Harford/Baltimore County line).

I look forward to hearing from you as things develop.

Very truly yours,



B. Scott Striebinger
President

BSS:cjd

1908 - 1988



Maryland Department of Transportation
State Highway Administration

346 Richard H. Trainor
Secretary

Hal Kassoff
Administrator

January 6, 1989

Mr. B. Scott Striebinger, President
Greater Mt. Vista Association
18 Vista View Court
Kingsville, Maryland 21087

Dear Mr. Striebinger:

Thank you for your recent letter expressing your comments and suggestions concerning the U.S. 1 project from Silver Spring Road to MD 152. Your name has been added to the project mailing list via which you will be informed of the final decision for this project.

Your support for widening Belair Road and your opposition to altering Harford Road have been noted. The 1986 Highway Needs Inventory does not show any improvements proposed for Harford Road (MD 147) north of Club Hill Road to MD 152.

Your support for Kingsville Option F has been noted. The two locations where concrete median barriers were proposed were through the Gunpowder Falls State Park at the Big and Little Gunpowder Falls crossings. A raised grass median is also being considered for both locations. If a concrete median barrier is chosen for either location we will look into ways to make them aesthetically pleasing.

The decision on what type of pavement will be used on a roadway improvement is not usually made in the project planning phase. That decision is usually made in the final design phase. I have forwarded a copy of your letter to our Bureau of Highway Design for their information.

Your comments and suggestions will be included in the Public Hearing record and will be given serious consideration during the final decision making process for this project. Thank you again for your interest in this project.

Very truly yours,

Neil J. Pedersen

Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

NJP:ds

cc: Mr. C. Robert Olsen (w/attachment)
Mr. Louis H. Ege, Jr. (w/attachment)
Mr. Charles Utermohle (w/attachment)
Mr. Michael Jager (w/attachment)

My telephone number is (301) 333-1110

VII.D-13

347

FORGE ROAD ASSOCIATES

4204 FORGE ROAD

PERRY HALL, MD. 21128

Mr. Charles E. Utermohle, III, P.E.
Senior Vice-President
Kidde Consultants, Inc.
1020 Cromwell Bridge Road
Baltimore, Maryland 21204

Dear Mr. Olsen,

I attended the public hearing regarding the U.S. Route 1 from Silver Spring Road to Maryland Route 152 on December 8, 1988 at Perry Hall Senior High School Auditorium. Our office building is located at 4204 Forge Road just in back of the Shell station. I just want to make certain that the traffic signal at the junction at Forge Road and Route 1 remains during this project and that we will be able to have access from both direction on Route 1. Please inform me as to whom I may correspond to regarding the future of my office building as I want to make certain that I will have this access even when the new Honneygo Boulevard portion is complete. Thank you.

Sincerely,

J. Nicholas Leyko, D.D.S.
J. Nicholas Leyko, D.D.S.

Michael J. Oles, D.D.S.
Michael J. Oles, D.D.S.

1908 - 1988



Maryland Department of Transportation
State Highway Administration

348

Richard H. Trainor
Secretary

Hal Kassoff
Administrator

January 10, 1989

J. Nicholas Leyko, D.D.S.
Michael J. Oles, D.D.S.
Forge Road Associates
4204 Forge Road
Perry Hall, Maryland 21128

Dear Drs. Leyko & Oles:

Thank you for your recent letter concerning the US 1 project.

It is anticipated that the new Honeygo Boulevard will be completed by the County prior to the US 1 project. According to their plans, Forge Road will stop at the proposed Honeygo Boulevard. The US 1/Honeygo Boulevard intersection will then become a major intersection and it will be signalized. The portion of Forge Road between Belair Road and Honeygo Boulevard will be left open either from Belair Road or from Honeygo Boulevard. Under both cases, we do not think a traffic signal at Forge Road will be required.

For further information regarding the proposed Honeygo Boulevard project, you may contact Mr. Richard Moore, Baltimore County Department of Traffic Engineering, County Courts Building, Towson, Maryland 21204.

Your letter will be included in the Public Hearing record for the US 1 project and will receive consideration during the final decision making process for this project.

Very truly yours,

Neil J. Pedersen

Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

NJP:ds

cc: Mr. C. Robert Olsen (W/Attach.)
Mr. C. Richard Moore " "
Mr. Louis H. Ege, Jr. " "

VII.D-15

My telephone number is (301) 333-1110

11715 Hillside Road
Kingsville, MD 21087
December 16, 1988

349

Mr. Richard H. Trainor
Maryland Department of Transportation
State Highway Administration
Project Development Division
Post Office Box 717
Baltimore Maryland 21203

RECEIVED

DEC 22 1988

SECRETARY
OF TRANSPORTATION

Dear Mr. Trainor:

The State Highway Administration has proposed an expensive and highly destructive plan, calling for Belair Road to be widened to six lanes with a median or barrier through parts of Perry Hall and Kingsville, reaching to Rt. 152 in Fallston. Certainly Belair Road is in need of relief, but it should come by draining it of commuter traffic, not by attracting traffic.

The draining may be accomplished in two ways:

- 1) A parallel road extension of Perring Parkway and or widening of Harford Road.
- 2) A road or roads connecting to I83 above the Beltway.

The problem is that the State Highway Administration has failed to realize commuting patterns have changed. At one time Belair Road was a spoke in the traffic wheel, the hub of which was Baltimore City. Today the typical commuter drives down to the Beltway along these spokes and crosses to the Towson-Hunt Valley corridor. Commuters far into Harford County would be grateful for recognition of the changed situation. Widening Belair Road only cements (asphalts) an outmoded pattern, forcing working people out of their way.

Aside from the inconvenience to commuters, the State Highway plan would utterly destroy the Perry Hall-Kingsville business and residential community. So many buildings and homes would be condemned, uprooting and perhaps bankrupting thousands of long-time worthy citizens. The political base of local politicians would be eroded and the cost to the taxpayer will be astronomical. Whom indeed does this plan benefit? I hope that the State Highway Administration will reconsider.


June Laffan

11715 Hillside Road
Kingsville, MD 21087
December 16, 1988

350

Senator Paul Sarbanes
G. H. Fallon Federal Building
Washington D.C.

Dear Senator Sarbanes:

The State Highway Administration has proposed an expensive and highly destructive plan, calling for Belair Road to be widened to six lanes with a median or barrier through parts of Perry Hall and Kingsville, reaching to Rt. 152 in Fallston. Certainly Belair Road is in need of relief, but it should come by draining it of commuter traffic, not by attracting traffic.

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June Laffan


John C. Laffan

United States Senate

WASHINGTON, DC 20510

351

JAN 24 1989

JAN 24 1989

January 17, 1989

RECEIVED
A87
JAN 24 1989
#702
DIRECTOR, OFFICE OF
PLANNING & PRELIMINARY ENGINEERING

Hal Kassoff
State Highway Administrator
707 N. Calvert Street
Baltimore, Maryland 21202

Dear Mr. Kassoff:

I am forwarding correspondence I received from Mr. and Mrs. John C. Laffan, constituents who are concerned about the proposed widening of Belair Road. Your careful review of the points raised in this correspondence would be greatly appreciated.

With best regards,

Sincerely,



Paul S. Sarbanes
United States Senator

Enclosure

PSS/gmb



Maryland Department of Transportation
State Highway Administration

352

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

FEB 07 1989

The Honorable S. Paul Sarbanes
United States Senate
322 Dirken Senate Office Building
Washington, D.C. 20510

Dear Senator Sarbanes:

Thank you for your recent letter and the enclosed letter from Mr. and Mrs. John C. Laffan concerning the Belair Road project.

We have already reviewed their letter and responded to them on January 9th. A copy of that letter is enclosed for your information.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in dark ink, appearing to be 'Hal Kassoff', written over the typed name.

Hal Kassoff
Administrator

HK:ds
Enclosure

cc: Mr. Neil J. Pedersen
Mr. C. Robert Olsen
Mr. Louis H. Ege, Jr.
Mr. Charles E. Utermohle, Jr.

VII.D-19

My telephone number is (301) _____



Maryland Department of Transportation
State Highway Administration

353

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

JAN 0 9 1989

Ms. June Laffan
11715 Hillside Road
Kingsville, Maryland 21087

Dear Ms. Laffan:

Secretary Trainor asked me to thank you for your recent letter concerning the Belair Road project and to respond directly to you.

The extension of Perring Parkway was considered in the 1970's and it was dropped due to public opposition at that time. Since then, development has occurred along this corridor making it more difficult to implement this plan now.

No major widening of Harford Road is currently being considered because of the existing substandard alignment and terrain which would cause extensive impacts along this route and make the project very expensive. However, portions of Harford Road are listed for improvements in our long-term Highway Needs Inventory.

The East-West Freeway as planned in the late 1960's was dropped from consideration, and it is no longer listed in our plans or in the county master plans.

Our traffic projections indicate that the average daily traffic volumes on Belair Road are expected to increase by 100% by the year 2015. In doing our traffic forecasts, we are very aware that commuter patterns have changed. Within the Baltimore metropolitan area, less than 40% of all workers are headed for downtown Baltimore. We will continue to work with both Baltimore and Harford counties in addressing east-west capacity needs, as well as north-south needs.

The State Highway Administration is currently considering the six lane alternate and the no-build alternate for the Belair Road project. Once we evaluate all the comments received as a result of the recent public hearing, an alternate will be selected. Your letter will be included in the public hearing record and will receive consideration during the final decision making process.

VII.D-20

My telephone number is (301) _____

Ms. June Laffan

354

Page 2

If the six lane alternate is selected for this project, the first phase for construction will be from Silver Spring Road to Pinedale Road. Next phases will be added to the construction program only when the traffic need occurs and after reviewing with elected officials from the area.

Once again, thank you for your comments and suggestions.

Sincerely,

ORIGINAL SIGNED BY:

HAL KASSOFF

Hal Kassoff

Administrator

HK:ds

cc: Governor William Donald Schaefer
Secretary Richard H. Trainor
Mr. Neil J. Pedersen
Mr. C. Robert Olsen

bcc: Mr. Louis.H.Ege, Jr.
Mr. Charles E. Utermohle

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

PROJECT DEVELOPMENT 355

DEC 15 11 25 AM '88

CONTRACT NO. B 813-101-471
U.S. ROUTE 1
SILVER SPRING ROAD
TO
MARYLAND RTE 152

COMBINATION LOCATION / DESIGN PUBLIC HEARING
DECEMBER 8, 1988

NAME J. Adam Plummer DATE 12/13/88

PLEASE PRINT

ADDRESS 2901 Reckord Road

CITY/TOWN Fallston STATE Maryland ZIP CODE 21047

I/We wish to comment or inquire about the following aspects of the project:

~~Your redefined proposal to improve the U.S. Route 1 route between Silver Spring Road and Maryland Route 152 is much better than the original proposal. I realize it will cause numerous relocations and disruptions to those who live along the right-of-way, in the over-all it will be a benefit to those who have to use daily. Your decision to proceed from Silver Spring Rd. to Pinedale Drive as the first phase of this project is just a little short of solving the problem as it exists now. You should not stop short of the Forge Road junction. The improvement of the Big Gunpowder River bridge and its approaches is timely. The option F proposal for the Kingsville area seems to be the wisest for the long term solution; it should be considered immediately to relieve the safety concerns that exist now. The proposed improvements further up Route 1; I take it will be delayed to a later date.~~

The improvement of the Harford Road corridor is of vital importance now to avoid further development of the right-of-way and cause an increased cost of improvements to that road at a later date which will be necessary before the year 2000. If nothing else, the state should require sufficient set back lines to insure adequate space for any improvements to that road in the future.

KEEP

Please add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

VII.D-22

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.

1908 - 1988



80 YEARS of SERVICE

**Maryland Department of Transportation
State Highway Administration**

356
Richard H. Trainor
Secretary

Hal Kassoff
Administrator

January 9, 1989

RE: Contract No. B-813-101-471 (N)
U.S. 1 from Silver Spring Road
to MD 152 (Mountain Road)
PDMS No. 032115

Mr. J. Adam Plummer
2901 Reckord Road
Fallston, Maryland 21047

Dear Mr. Plummer:

Thank you for your recent letter expressing your comments and suggestions concerning the Belair Road project from Silver Spring Road to Mountain Road.

The limits of the first phase were determined after several discussions with the community and the elected officials representing the project area. There are no construction funds allocated for the first phase at this time, however, there is funding allocated for design and right of way acquisition.

Your support for Kingsville Option F and the Big Gunpowder Falls project has been noted. Your comments and suggestions will be included in the Public Hearing record and will be given consideration during the final decision making process.

No improvements to Harford Road are currently being planned. Our 20 year Highway Needs Inventory does not show any improvements for Harford Road between Club Hill Road and MD 152 (Mountain Road).

Thank you again for your interest in this project, you will be informed of the final decision once it is made.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Sue Rajan

Sue Rajan
Project Manager

LHE:SR:ds

cc: Mr. C. Robert Olsen (w/attachment)
Mr. Charles Utermohle (w/attachment)

333-1138

My telephone number is (301) _____

VII.D-23

STATE HIGHWAY ADMINISTRATION PROJECT
QUESTIONS AND/OR COMMENTS DEVELOPMENT

357

CONTRACT NO. B 813-101-471

U.S. ROUTE 1

SILVER SPRING ROAD

TO

MARYLAND RTE 152

JAN 13 3 57 PM '88

COMBINATION LOCATION / DESIGN PUBLIC HEARING
DECEMBER 8, 1988

NAME DESMOND MILLER DATE 11-28-88

PLEASE PRINT

ADDRESS 3812 MILLER RD

CITY/TOWN KINGSVILLE STATE MD ZIP CODE 21087

I/We wish to comment or inquire about the following aspects of the project:

Re: Median crossover at MILLER RD.

I was pleased to see that your plans provide for such a crossover.

I feel it is very important that the crossover provide for two-way crossing, that is northbound left turns into Miller Rd and for left turns out of Miller Rd northbound.

Thank you
/DMA

- Please add my/our name(s) to the Mailing List.*
- Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.



**Maryland Department of Transportation
State Highway Administration**

358
Richard H. Trainor
Secretary
Hal Kassoff
Administrator

February 28, 1989

RE: Contract No. B 813-101-471
US 1 from Silver Spring Road
to MD 152
PDMS No. 132115

Mr. Desmond Miller
3812 Miller Road
Kingsville, Maryland 21087

Dear Mr. Miller:

Thank you for your comments concerning the Belair Road project.

The crossover proposed at Miller Road would allow northbound traffic to make left turns into Miller Road and also left turns from Miller Road to northbound US 1.

Your comments will be included in the Public Hearing record and will receive serious consideration during the final decision making process for the project.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Sue Rajan
Sue Rajan
Project Manager

LHE:SR:eh

cc: Mr. C. Robert Olsen (w/incoming)

VII.D-25

My telephone number is (301) 333-1138

359

TO: MS. SUE RAJAN
PROJECT MANAGER
PROJECT DEVELOPMENT DIVISION
STATE HIGHWAY ADMINISTRATION
707 N. CALVERT ST.
BALTIMORE, MD 21202

FROM: RICHARD L. COLGAN
11815 BELAIR ROAD
KINGSVILLE, MD 21087
PHONE (301) 592-9083

SUBJECT: U. S. 1 RECONSTRUCTION IMPACT ON
55 YEAR RESIDENCE

DATE: DECEMBER 13, 1988

(2ND COPY)

360

11815 Belair Road
Kingsville, MD 21084
12/13/88

Maryland Dept. Of Transportation
State Highway Administration
Office of Planning & Preliminary Engineering
Box 717
Baltimore, MD 21203

Subj: U.S. 1 to MD ROUTE 152 PROJECT

Dear Ms. Rajan:

My name is Richard L. Colgan. I have lived at 11815 Belair Road, Kingsville, MD since 1933. My phone number is 592-9083.

I am employed by the Dept. of Defense, Naval Air Systems Command, as an Aeronautical Engineer. I am responsible for aircraft engine installations on all Navy/Marine Corp., fixed-wing fighter, attack, & patrol aircraft. I am a graduate engineer from one-of-three top rated engineering schools (Rensselaer) with over 35 yrs. experience in virtually all phases of the demanding aerospace industry plus having been a licensed pilot and mechanic. Obviously, I am very used to making complex compromises that affect flight safety. I expect the State Highway Administration to compromise with me to minimize the impact of the U.S. 1 project on my property. In any case, the selected alternate will severely degrade my standard of living and property value to say nothing of greatly increasing access and egress hazards, noise, and potential house damage. I think these factors already represent a major compromise to put it mildly!

The enclosed photos illustrate my proximity to U.S. 1. I simply cannot be any closer than I am now! My house is one-of-six on the East side of U.S. 1 from Kingsville Motors up to the Jerusalem Road intersection on U.S. 1. It is also the best house of the six from a construction standpoint. It has a poured concrete foundation (no cracks) with full basement, four rooms and entry hall downstairs, four bedrooms and hall and partially tiled bath upstairs, pretty-grained interior woodwork with hardwood floors, a multi-colored pattern stone terrazzo front porch (can easily be screened or glassed in), slate roof, small rear porch and a detached garage with tarred stone driveway. It has oil heat and well and septic system with no problems ever on the latter two. You will note that I have reinforced the stone wall bordering the sidewalk and U.S. 1 with steel and poured concrete rather than just mortared stone type construction. Why? To help keep it standing after numerous auto hits over the years! There is no way that I can afford to duplicate the quality of this house! Unfortunately, the pay of most engineers never even approaches that of Dentists, Doctors, Druggists, Funeral Directors, Lawyers, and Realtors/Developers.

361

Factually, approximately one-half of all properties impacted by this project in the area being discussed are currently owned by these people. The state recently purchased the Kingsville Pharmacy for, I'm sure, a very high price. Further, approximately one-half of the above one-half have owned these properties for less than six or seven years as contrasted to my residency of fifty five years!

If necessary, by moving either E Modified or Option F proposed right of way only a few feet to the west, it appears that I can retain my current property. This move would help straighten the deceptive, accident-causing curve on the inside rather than the outside as done in E Modified. This should certainly be feasible since the state already owns sizeable property on this side of the road.

Under Option F, the potential frontage loss at 11824 Belair Road, for example, is certainly eased considerably by the addition of another entrance from the one-way southbound lanes; I SHOULD BE SO LUCKY! Further, the building is currently a Dentist Office with a 27 hour scheduled workweek. Prior to this, it was a Real Estate office.

I have reviewed the August 24, 1988 letter to the State from the Maryland Historical Trust regarding the funeral home known as Days-Dean-King House. Although they naturally prefer to keep the existing right of way, even though the original U.S. 1 roadbed was closer, I feel that an impartial foundation survey by two qualified engineers is required if even a few feet of this property would ease property impact on the six residences and Kingsville Motors on the East Side of U.S. 1. The funeral home is farther from the road than all but one residence and, in my case, 2 1/2 - 3 times farther distant. I'm certain that the corpses have not done a recent survey and, if need be, the foundation could be reinforced for a pittance. We are all equally concerned about our foundations! I'm also interested in preserving history but this sacrosanct structure simply does not qualify compared even to the covered bridge in Jerusalem which can be used by all people. There is not even a historical marker on the property to the best of my knowledge. Doubtless, only very few people in the State even know its historical significance. I also understand that the owner can, at his sole choosing, raze the building at any time. Please explore the possible use of some of this property prior to final alternate selection. You may also consider locating Option F behind the funeral home.

I realize the State faces many difficult problems but so do the rest of us who are being continually squeezed by uncontrolled development which makes roads obsolete prior to completion. At this moment, there is a rezoning request to build 57 houses on the property immediately surrounding the funeral home. This means at least 90 - 100 more autos to further congest the Kingsville area with another sizeable development pending on Jerusalem Road to say nothing of the never-ending Harford County commuter rush.

362

Harford Road has only 3 major curves on it from Carney to the Benson intersection on U.S. 1. As pointed out at the December 8 and previous meeting, many citizens cannot understand why this alternate route is not being developed prior to U.S. 1. It represents a far easier solution, in all respects, than does U.S. 1.

ACTION REQUESTED:

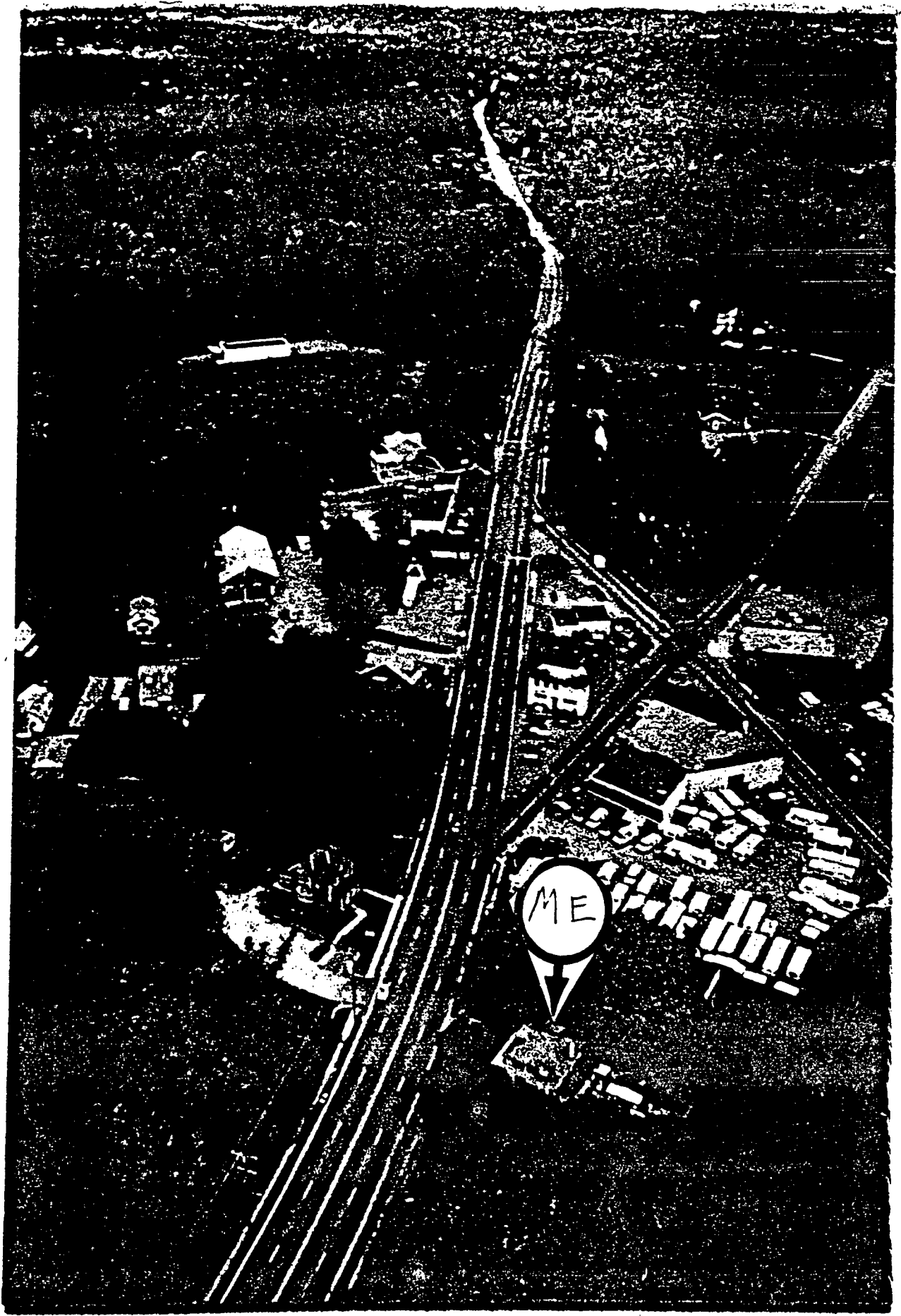
1. Please do not take any of my property based on the above discussion.
2. Since I will be a Senior Citizen in two months and being a handicapped veteran, I consider it absolutely essential to improve my access/egress since any alternate will increase my turn hazards enormously! The State can purchase a right of way on the immediate south side of my property (currently a vacant lot) leading to my backyard. This will allow "relatively easy" access/egress although at the destruction of my yard, of course.
3. I look forward to having your cognizant engineers visit me at their earliest convenience.

THANK YOU FOR CONSIDERING THE REQUESTS OF THIS 55 YEAR RESIDENT OF THE IMMEDIATE KINGSVILLE AREA!

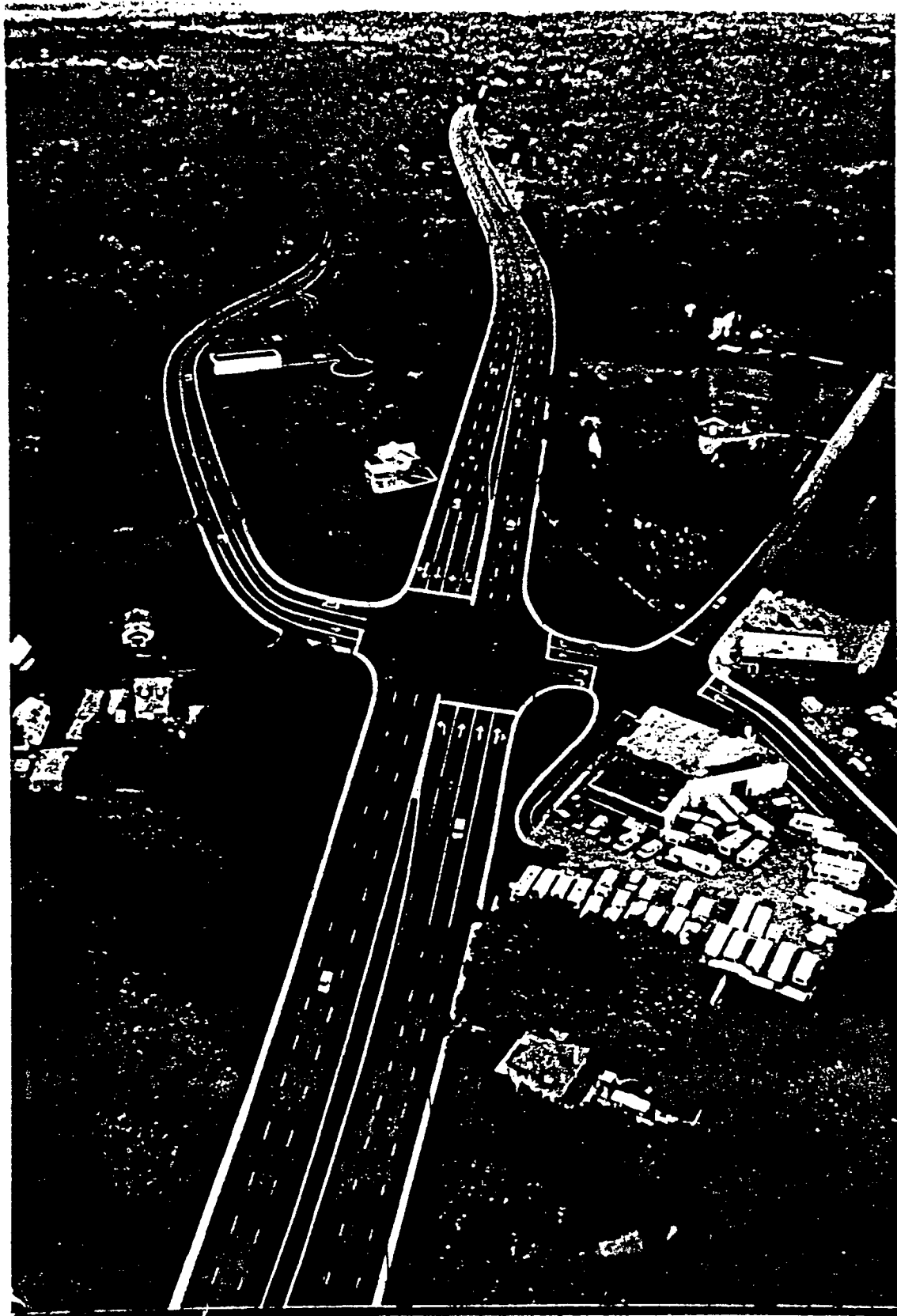
Sincerely,



Richard L. Colgan

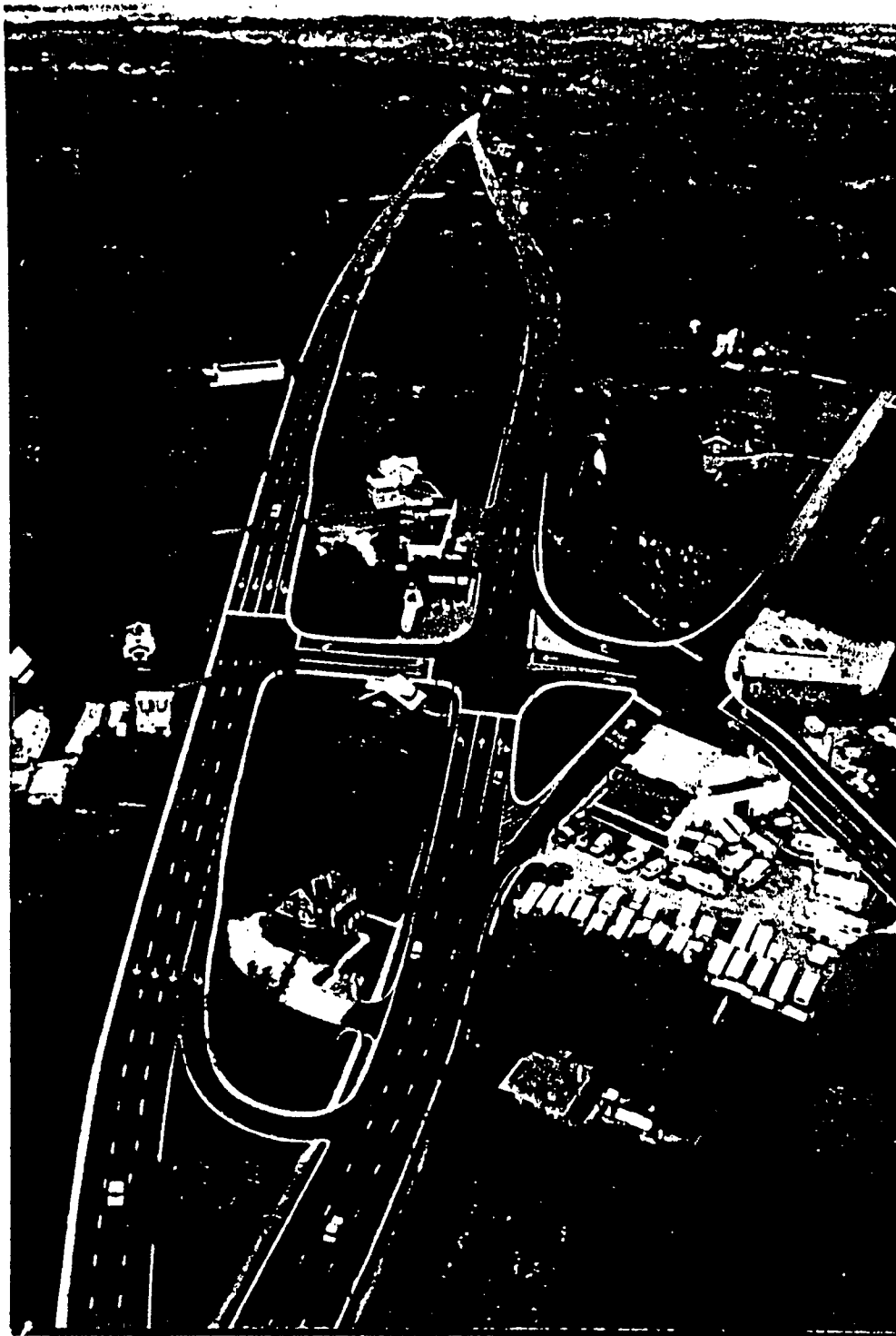


EXISTING



OPTION E MODIFIED

365



OPTION F



366

MY ACCESS - DENTIST PARKING LOT OPPOSITE

CIRCLES SHOW STEEL REBARS WHICH ARE REINFORCED VIA STEEL I BEAMS, STONES, & Poured CONCRETE + HORIZONTAL REBARS ON FRONT OF WALL - I COULD HAVE BEEN

(SUNDAY 12/11/88)

KILLED WHILE WORKING HERE DUE TO CINDER BLOCK BEING SLUNG-OFF OF TRUCK DUE TO CURVE. I HAD JUST VACATED THE SPOT! STATE POLICE OFFERED TO PRESS CHARGES.





7/12/7
STATE OWNED
↓

ACCESS VIEWS
(SUNDAY 17/11/88)





ACCESS VIEWS

(SUNDAY 12/11/88)

FROM BEDROOM





↑
VIEWS LOOKING NORTH & SOUTH
↓
SHOWING ACCESS &
CURVE. TRAFFIC LIGHT REQUIRED IN
ANY CASE (NOW) AT LONG FIELD
FARM ROAD ABOVE. CARS ARE DOING
40-50MPH IN FRONT OF MY HOUSE
CONSTANTLY! (SUNDAY 12/11/88)

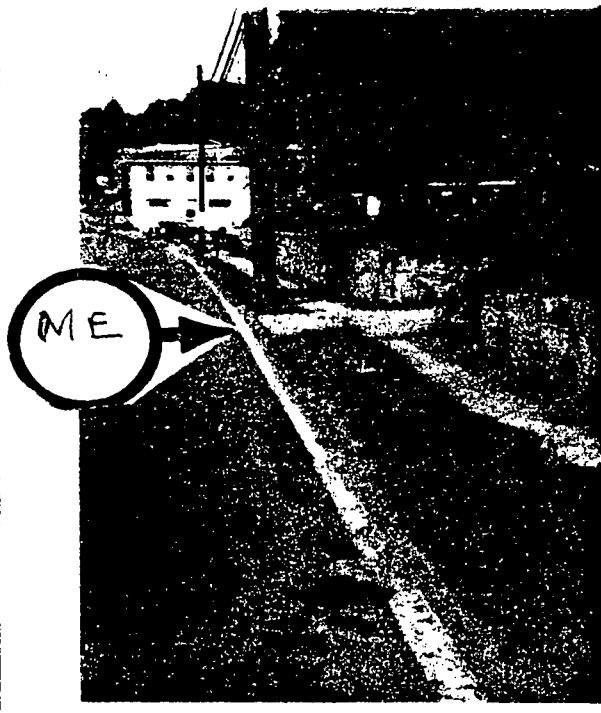




STATE OWNS ABOVE NOTED PROPERTY
VIEW FROM UPSTAIRS BEDROOMS

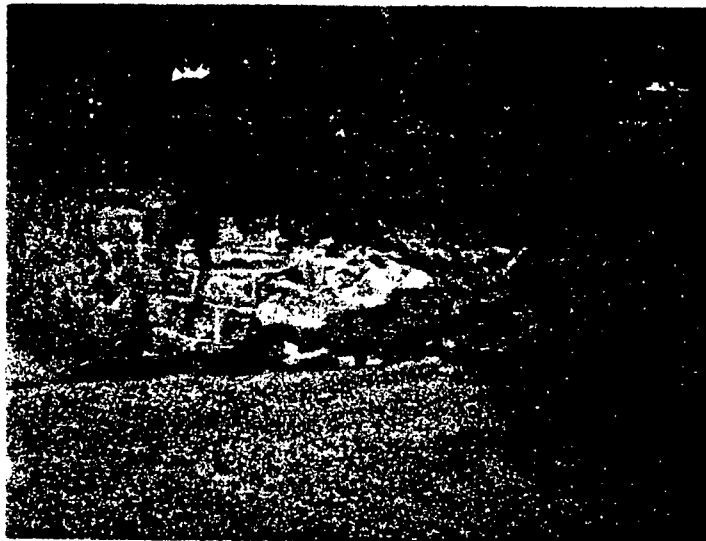


3711

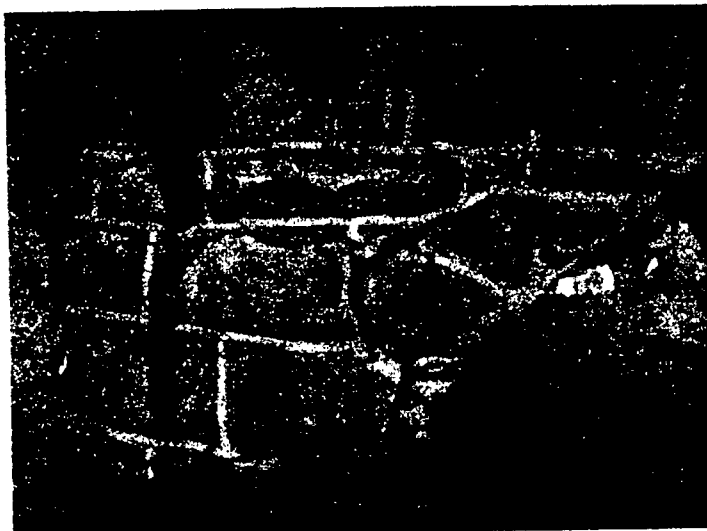


↑
ACCIDENT DAMAGE TO
MY WALL & NEIGHBORS
ON 9/17/82
↓

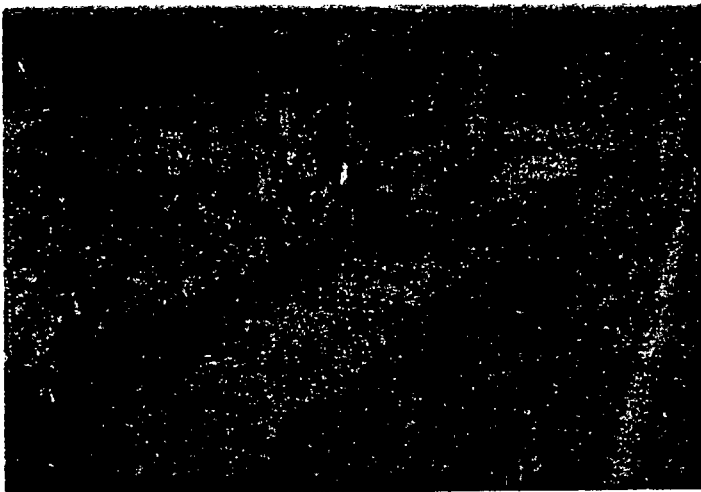




↑
MY WALL DAMAGE DONE BY
9/17/82 ACCIDENT



372.



↖ NEIGHBOR WALL DAMAGE
ON 9/17/82

DENTIST
OFFICE



"RUSH HOUR" TRAFFIC AT
MY ACCESS ON 9/17/82



PLEASE COMPROMISE SO

THAT YOU WILL NOT DESTROY
MY PROPERTY!

THANK YOU!

Richard L. Colgan



Maryland Department of Transportation
State Highway Administration

375

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

March 28, 1989

RE: Contract No. B-813-101-471 (N)
U.S. 1 from Silver Spring Road
to MD 152
PDMS No. 032115

Mr. Richard L. Colgan
11815 Belair Road
Kingsville, Maryland 21084

Dear Mr. Colgan:

Thank you for recent letter concerning the proposed widening of Belair Road from Silver Spring Road to Mountain Road and its impacts on your property.

We are currently studying an option similar to Option F which we presented at the Public Hearing on December 8, 1988, that would move both northbound and southbound U.S. 1 around Kingsville. This option may reduce the impacts to your property.

As per our telephone conversation, we will be meeting with you at your home on Friday, April 14th to discuss the issues raised in your letter.

We appreciate your interest in this project and look forward to meeting with you to discuss your concerns.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by: Sue Rajan
Sue Rajan
Project Manager

LHE:SR:ds

cc: Mr. C. Robert Olsen (w/incoming)
Mr. Charles Utermohle (w/incoming)

VII.D-42

My telephone number is (301) _____



Maryland Department of Transportation
State Highway Administration

376
Richard H. Trainor
Secretary
Hal Kassoff
Administrator

June 28, 1989

RE: Contract No. B-813-101-471 (N)
U.S. 1 from Silver Spring Road
to MD 152
PDMS No. 032115

Mr. Richard L. Colgan
11815 Belair Road
Kingsville, MD 21084

Dear Mr. Colgan:

This is a follow up letter to our meeting with you held on April 14, 1989 to discuss the impacts to your property resulting from the proposed improvements to Belair Road.

At that meeting we discussed with you that we were looking at an option that would take all six lanes of U.S. 1 around Kingsville. However, that option would have taken two additional residences, all four motel buildings, a six unit apartment building, and the Dentist's office. Also this new option would have cost approximately \$10 million more to build than Option F. Because of the additional impacts and the additional cost it was decided to go ahead with Option F through Kingsville.

If you have any further questions, you may contact Ms. Sue Rajan, the Project Manager for the U.S. 1 project at 333-1138.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Office of Planning and
Preliminary Engineering

by:

Sue Rajan / DM
Sue Rajan, Project Manager
Project Planning Division

LHE:SR:ds

cc: Mr. C. Robert Olsen
Mr. Dave Manly
Ms. Barbara Allera-Bohlen

My telephone number is (301) 333-1138

VII.D-43

DEC 88 11 52

STATE HWY ADM.

11715 Hillside Road
Kingsville, MD 21087
December 16, 1988

377

Mr. Hal Kassoff
Maryland Department of Transportation
State Highway Administration
Project Development Division
Post Office Box 717
Baltimore Maryland 21203

Dear Mr. Kassoff:

The State Highway Administration has proposed an expensive and highly destructive plan, calling for Belair Road to be widened to six lanes with a median or barrier through parts of Perry Hall and Kingsville, reaching to Rt. 152 in Fallston. Certainly Belair Road is in need of relief, but it should come by draining it of commuter traffic, not by attracting traffic.

The draining may be accomplished in two ways:

- 1) A parallel road extension of Perring Parkway and or widening of Harford Road.
- 2) A road or roads connecting to I83 above the Beltway.

The problem is that the State Highway Administration has failed to realize commuting patterns have changed. At one time Belair Road was a spoke in the traffic wheel, the hub of which was Baltimore City. Today the typical commuter drives down to the Beltway along these spokes and crosses to the Towson-Hunt Valley corridor. Commuters far into Harford County would be grateful for recognition of the changed situation. Widening Belair Road only cements (asphalts) an outmoded pattern, forcing working people out of their way.

Aside from the inconvenience to commuters, the State Highway plan would utterly destroy the Perry Hall-Kingsville business and residential community. So many buildings and homes would be condemned, uprooting and perhaps bankrupting thousands of long-time worthy citizens. The political base of local politicians would be eroded and the cost to the taxpayer will be astronomical. Whom indeed does this plan benefit? I hope that the State Highway Administration will reconsider.


June Laffan

JAN 20 9 42 AM '89

January 18, 1989

Mr. and Mrs. John C. Laffan
11715 Hillside Road
Kingsville, Maryland 21087

Dear Mr. & Mrs. Laffan:

Thank you for your December 16, 1988 letter to Governor William Donald Schaefer about the Belair Road project. The Governor asked me to look into this matter and respond directly to you.

The State Highway Administration has taken into consideration the change in the commuter pattern in estimating the future traffic volumes. The daily traffic volumes are expected to double along portions of Belair Road in the next 25 to 30 years.

Projects such as an East-West Freeway and Perring Parkway, as planned earlier, were stopped in the 1970's due to public opposition and are not listed in the Baltimore County Master Plan. Harford Road, because of its narrow width and substandard geometrics, could not simply be widened. A completely new roadway would have to be constructed, which would be an extremely expensive project.

If the six-lane alternate is selected for this project, the first phase to be constructed will be from Silver Spring Road to Pinedale Road. Subsequent phases will be added to the construction program only as the traffic need occurs and in consultation with the local elected officials. No improvements along Belair Road are currently funded for construction.

Thank you again for writing and letting us know of your concerns. I understand that the State Highway Administrator, Hal Kassoff, has also responded to your letter in a more detailed

Mr. and Mrs. John C. Laffan
Page Two

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manner. If you need additional information, please contact Mr. Neil Pedersen, Director of Planning and Preliminary Engineering, at (301) 333-1110.

Sincerely,

(Faint signature)

Richard H. Trainor
Secretary

RHT:ds

cc: The Honorable William Donald Schaefer
Mr. Hal Kassoff
Mr. Neil Pedersen

bcc: ~~Mr.~~ Louis H. Ege, Jr.
Mr. C. Robert Olsen
Mr. Neil J. Pedersen
Ms. Sue Rajan
Mr. Charles E. Utermohle

Prepared by: Ms. Sue Rajan, Project Development Division - SHA
333-1138, (1-4-88)

380

Nov. 17, 1988

Dear Mr. Pederson,

In reference to your recent letter, please allow me some time to voice my opinion regarding the widening of Belair Rd. at the General meeting for the public, to be held Dec. 8, 1988 at the Perry Hall Sr. Highschool.

Thank you for your concern.

Sincerely,
Claude Rowl
11250 Belair Rd.
Kingville, Md.
21087

RECEIVED

NOV 21 1988

DIRECTOR, OFFICE OF
PLANNING & PRELIMINARY ENGINEERING

FORGE ROAD ASSOCIATES

4204 FORGE ROAD

PERRY HALL, MD. 21128

381
PROJECT
DEVELOPMENT

DEC 10 1 20 PM '88

Ms. Sue Rajan
Project Manager
Project Development Division
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Olsen,

I attended the public hearing regarding the U.S. Route 1 from Silver Spring Road to Maryland Route 152 on December 8, 1988 at Perry Hall Senior High School Auditorium. Our office building is located at 4204 Forge Road just in back of the Shell station. I just want to make certain that the traffic signal at the junction at Forge Road and Route 1 remains during this project and that we will be able to have access from both direction on Route 1. Please inform me as to whom I may correspond to regarding the future of my office building as I want to make certain that I will have this access even when the new Honneygo Boulevard portion is complete. Thank you.

Sincerely,

J. Nicholas Leyko, D.D.S.
J. Nicholas Leyko, D.D.S.

Michael J. Oles, D.D.S.
Michael J. Oles, D.D.S.

388

REDMER INSURANCE & INVESTMENT SERVICES

(301) 252-8900



30 E. Padonia Road Suite 302 Timonium, Maryland 21093

November 15, 1988

Mr. Neal Pederson
Office of Planning and Preliminary Engineering
P.O. Box 717
Baltimore, Md. 21203-0717

Dear Mr. Pederson:

I would appreciate if you would allow me to speak at the public hearing regarding the widening of Belair Road on December 8th, at 7 P.M..

You may contact me at 4101 Kahlston Road, Baltimore, Md. 21236, (301) 256-9513.

Thank you for your consideration.

Sincerely,

Al Redmer, Jr.
President
Perry Hall Improvement Association

AR:bg

RECEIVED

NOV 16 1988

DIRECTOR, OFFICE OF
PLANNING & PRELIMINARY ENGINEERING

VII.D-49



**Maryland Department of Transportation
State Highway Administration**

363
Richard H. Trainor
Secretary
Hal Kassoff
Administrator

January 6, 1989

RE: Contract No. B 813-101-471
US 1 - Silver Spring Road
to MD 152
PDMS No. 132114

Mr. Terry Neifeld
Germantown Permanent Building
and Loan Association
9637 Belair Road
Perry Hall, Maryland 21128

Dear Mr. Neifeld:

This is in response to your discussion with Ms. Barbara Allera-Bohlen on December 8th at the Public Hearing for the US 1 project.

The architectural historian looked at the Germantown Permanent Building and Loan Association structure to assess whether it is historically significant. Based on the U.S. Department of Interior's criteria for determining whether a building property is eligible for the National Register of Historic Places, it was determined that this building was not architecturally significant (embodying distinctive characteristics of a type, period or method of construction) or historically important. That is, the building is not associated with historical events or significant persons.

We wish to apologize for the delay in responding and hope this satisfies your inquiry.

Should you have any questions, please contact Ms. Barbara Allera-Bohlen at 333-6745 or Ms. Rita Suffness at 333-1133.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

LHE:eh
cc: Ms. Cynthia D. Simpson
Ms. Sue Rajan ✓
Ms. Rita Suffness

333-1130

VII.D-50

My telephone number is (301) _____

Sender: Write or type message, pull out yellow sheet, fold at (>) to fit 771 DU-O-VUE® Envelope.

PRODUCT 187-3 **NEBS** Inc., Groton Mass. 01471. To Order PHONE TOLL FREE 1 + 800-225-4380

NO CARBON PAPER REQUIRED: Type or write on original - Impression will automatically appear on copies beneath

FROM

TRI-STATE REFRIGERATION, INC.
2300 Sinclair Lane
BALTIMORE, MARYLAND 21213

Message Reply

DATE:

December 15, 1988

FILE NO.

ATTENTION:

SUBJECT:

PRIORITY

- URGENT!**
- SOON AS POSSIBLE**
- NO REPLY NEEDED**

(301) 276-6050

TO

State Highway Administration
Project Development Division
P. O. Box 717
Baltimore, Maryland 21203

PROJECT DEVELOPMENT DIV.
DEC 16 3 17 PM '88

Gentlemen:

Please send us a copy of your booklet "U. S. Route 1, Silver Spring Road to Maryland Route 152". (Contract No. B 813-101-471) Thank you.

MESSAGE

J. William Ruppert

SIGNED: J. William Ruppert, Pres.

DATE OF REPLY:

REPLY TO:

REPLY

SIGNED: _____

SENDER: MAIL RECIPIENT WHITE AND PINK SHEETS.

RECIPIENT: WRITE REPLY. RETURN WHITE TO SENDER. KEEP THIS PINK COPY.

VII.D-51

384

385



12 OFFICE STREET • BEL AIR, MARYLAND 21014 • TELEPHONE: 836-5700

January 31, 1989

RECEIVED

FEB 3 1989

DIRECTOR, OFFICE OF
PLANNING & PRELIMINARY ENGINEERING

Mr. Neil J. Pedersen
Director
Office of Planning and
Preliminary Engineering
P.O. Box 717
Baltimore, MD 21203-0717

Dear Mr. Pedersen:

Please send us 1 copy of the study for improvements to U.S. 1 from Silver Spring Road in Baltimore County to MD 152 in Harford County. A copy of the newspaper clipping is attached from your convenience.

Also, please send 2 copies of study for S.H.A. Contract No. H873-101-470N, P.D.M.S. No. 122040.

The copies should be sent to the following address:

Mr. William D. Naughton
Senior Vice President
First National Bank of Maryland
12 Office Street
Bel Air, MD 21014

In addition, please include us on your regular mailing list. Thank you.

Sincerely,

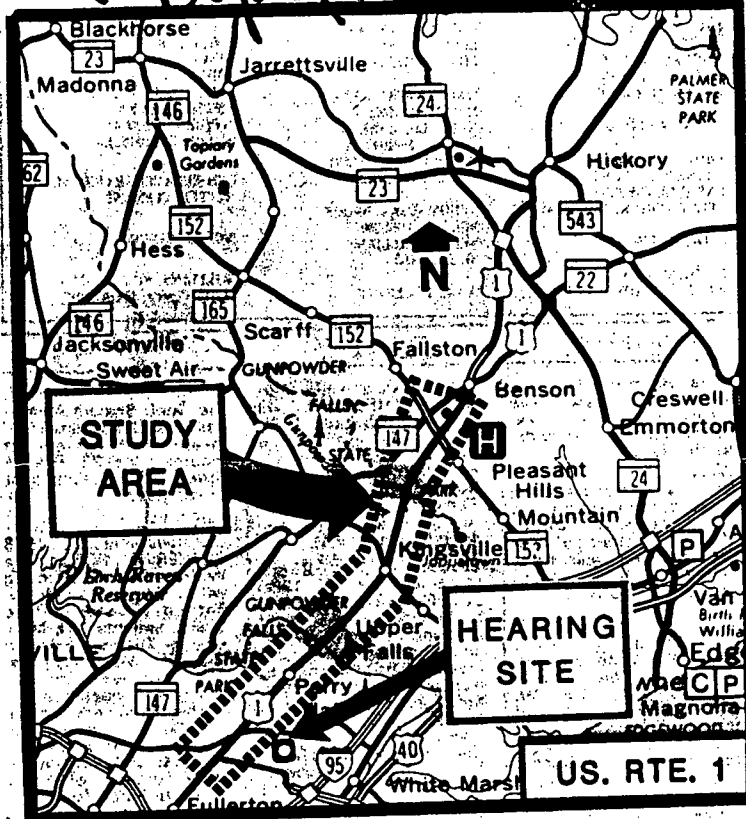
A handwritten signature in cursive script that reads 'Carol A. Wright'.

Carol A. Wright
Administrative Secretary

386

WE NEED A COPY OF STUDY

PUBLIC NOTICE
 MARYLAND DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 WILL CONDUCT A
 LOCATION/DESIGN PUBLIC HEARING
 December 8, 1988 at 7:00 p.m.
 Perry Hall Senior High School
 4601 Ebenezer Road
 Baltimore, Maryland



This project study proposes improvements to U.S. 1 from Silver Spring Road in Baltimore County to MD 152 in Harford County.

The purpose of this hearing is to afford all interested persons the opportunity to present their views regarding the proposed location and general design of the project, including the social, economic and environmental effects for both the build alternatives and the No-Build alternate.

Beginning at 6:00 p.m., mapping depicting the project alternatives will be on display. Representatives of the State Highway Administration will be available to receive your comments and discuss points of interest with you.

A formal presentation of approximately 30 minutes will include a description of the project alternatives; an environmental summary; information on right-of-way acquisition; relocation assistance policies and procedures; and Title VI of the Equal Opportunity Program. This presentation will be followed by the receipt of comments from the public.

The State Highway Administration, in cooperation with the Maryland Historical Trust has identified 6 historic sites in the study area that are currently eligible for the National Register of Historic Places. These sites are identified in the environmental document prepared for the project. In accordance with the Section 106 procedures of the National Historic Preservation Act, the potential impact, if any, and preliminary determination of effect will be presented for each site. This Public Hearing will provide the opportunity for input from the public in accordance with Section 106 public involvement procedures.

If requested in writing, you might be considered eligible to receive additional information which may be developed during the course of consultation with the Advisory Council and/or Maryland Historical Trust.

Individuals and representatives of organizations that desire to be heard, or who want to be placed on the project mailing list, may submit a request to Mr. Neil J. Pedersen, Director, Office of Planning and Preliminary Engineering, P.O. Box 717, Baltimore, Maryland 21203-0717. If you received a copy of this notice in the mail, you are currently enrolled on the project mailing list. Those persons enrolled will be kept informed of project development and the opportunity for public involvement as the study progresses.

Requests to speak should be received no later than December 7, 1988 in order to ensure proper scheduling of the hearing. Attendees at the hearing who desire to speak may do so following those on the previously established list. If a large number of speakers enroll, a limitation of time allotted to each speaker may be necessary. Brochures and forms for written comments will be available at this hearing.

Written statements and other exhibits in lieu of or in addition to oral presentation at the hearing may be submitted to Mr. Pedersen at the above address until December 23, 1988 in order to be included in the "Public Hearing Transcript".

Beginning on November 23, 1988, the Environmental Impact Statement describing the study will be available for inspection and copying, Monday through Friday, at the following locations:

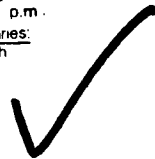
Baltimore County Libraries
 Perry Hall Branch
 9440 Belair Road
 Baltimore, Maryland 21236
 Hours: Mon.-Thurs.
 10:00 a.m. — 9:00 p.m.
 Fri. & Sat.
 10:00 a.m. — 5:30 p.m.
 Sun.: 12:00 noon — 5:00 p.m.

Whitemarsh Branch
 8133 Sandpiper Circle
 Baltimore, Maryland 21236
 Hours: Mon.-Thurs.
 10:00 a.m. — 9:00 p.m.
 Fri. & Sat.
 10:00 a.m. — 5:30 p.m.
 Sun. 12 noon — 5:00 p.m.

State Highway Administration
 District #4 Office
 2323 West Joppa Road
 Brooklandville, Maryland 21022
 Hours: 8:30 a.m. — 4:30 p.m.

Library — Room 415
 707 North Calvert Street
 Baltimore, Maryland 21202
 Hours: 8:15 a.m. — 3:15 p.m.

Harford County Public Libraries:
 Fallston Jarrettsville Branch
 1461 Fallston Road
 Fallston, Maryland 21047
 Hours Mon & Wed
 10:00 a.m. — 8:00 p.m.
 Tues & Thurs
 1:00 p.m. — 8:00 p.m.
 Fri & Sat
 5:00 p.m. — 8:00 p.m.



STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

CONTRACT NO. B 813-101-471

U.S. ROUTE 1

SILVER SPRING ROAD

TO

MARYLAND RTE 152

387 PROJECT DEVELOPMENT DIVISION
JAN 10 1 23 PM '88

COMBINATION LOCATION / DESIGN PUBLIC HEARING

DECEMBER 8, 1988

NAME BRIAN FULLERTON DATE 1/4/88

PLEASE PRINT

ADDRESS 7706 CHAPMAN ROAD

CITY/TOWN KINGSVILLE STATE MD ZIP CODE 21087

I/We wish to comment or inquire about the following aspects of the project:

6 LANES WOULD BE EXCESSIVE.
CONCRETE BARRIERS ARE DISGUSTING (I.E. RT 40)

Please add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

VII.D-54

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.

7404 New Cut Road
Kingsville md 21087

Dear Mr Pedersen,

Please put me on the mailing list to receive all material regarding the US RT 1 project. I am interested in any materials that are available on this project.

Thank You
Michele Galagher
(301) 592-2457

STATE HIGHWAY ADMINISTRATION PROJECT DEVELOPMENT DIVISION
QUESTIONS AND/OR COMMENTS

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CONTRACT NO. B 813-101-471
U.S. ROUTE 1
SILVER SPRING ROAD
TO
MARYLAND RTE 152

DEC 6 9 13 AM '88

COMBINATION LOCATION / DESIGN PUBLIC HEARING
DECEMBER 8, 1988

NAME Frederick C. Petrich DATE 29 Nov 1988

PLEASE PRINT

ADDRESS 11940 Belair Rd. P.O. Box 355

CITY/TOWN Kingsville STATE Md. ZIP CODE 21087

I/We wish to comment or inquire about the following aspects of the project:

Should option F be developed on the Kingsville project, I would like to request that my present driveway right of way to both Belair Rd. (East) & Sunshine Ave. be maintained.

Should a choice be necessary, I would much prefer to have continued access to Sunshine Ave (New southbound Rt I site) rather than the present north bound Belair Rd.

This East entrance is extremely dangerous, approaching by a left hand turn from Belair Rd. The sight triangle is extremely short when exiting from this point because of a rise in the road just at this property location (11940 Belair Rd.) Fast moving traffic north bound from the intersection of Belair Rd & Sunshine Ave & Bradshaw is suddenly upon a car or pedestrian at this driveway entrance.

Please add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.



Maryland Department of Transportation
State Highway Administration

392

Richard H. Trainor
Secretary
Hal Kassoff
Administrator

March 28, 1988

RE: Contract No. B-813-101-471 (N)
U.S. 1 from Silver Spring Road
to MD 152 (Mountain Road)
PDMS No. 032115

Mr. Frederick C. Petrich
11940 Belair Road
P.O. Box 355
Kingsville, Maryland 21087

Dear Mr. Petrich:

Thank you for your letter expressing your comments and suggestions concerning the Belair Road project from Silver Spring Road to Mountain Road.

The current plan for Kingsville Option F would allow for both of your entrances to remain in place. Option F proposes the construction of a new southbound roadway parallel to existing U.S. 1 which would diverge from existing U.S. 1 just north of the Lassahn Funeral Home and converge with existing U.S. 1 just north of the Kingsville Motel. Existing U.S. 1 would be striped to provide for three northbound lanes and the new roadway would have three southbound lanes.

The sight distance on the existing roadway would not be improved under Option F. However, entering onto northbound U.S. 1 from your property should be safer because you will no longer have to cross the southbound lanes of U.S. 1.

Thank you again for your interest in this project, your comments will be included in the Public Hearing record and will be considered during the final decision making process. You are currently on our mailing list via which you will be informed of the selected alternate.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by:

Sue Rajan

Project Manager

LHE:SR:ds

cc: Mr. C. Robert Olsen (w/attachment)
Mr. Charles Utermohle (w/attachment)

VII.D-59

My telephone number is (301) _____

STATE HIGHWAY ADMINISTRATION PROJECT DEVELOPMENT
QUESTIONS AND/OR COMMENTS DIVISION

393

CONTRACT NO. B 813-101-471

U.S. ROUTE 1

DEC 16 9 41 AM '88

SILVER SPRING ROAD

TO

MARYLAND RTE 152

COMBINATION LOCATION / DESIGN PUBLIC HEARING

DECEMBER 8, 1988

NAME Howard H. Rye DATE Dec 16, 1988

PLEASE PRINT

ADDRESS 4237 Chapel Rd.

CITY/TOWN Perry Hall P.O. STATE Md. ZIP CODE 21128

I/We wish to comment or inquire about the following aspects of the project:

Your engineers need a lot common sense. We need big passes instead of Route 1 being widened. What happened to the roads they all lead to the old roads. All the new developments are little necks. Perry Hall Blvd the old plan had good planning. Why wasn't it finished?

Please add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

VII.D-60

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.



**Maryland Department of Transportation
State Highway Administration**

394
Richard H. Trainor
Secretary
Hal Kassoff
Administrator

April 13, 1989

RE: Contract No. B 813-101-471
U.S. 1-Belair Road from
Silver Spring Road to MD 152
PDMS No.032115

Mr. Howard H. Rye
4237 Chapel Road
Perry Hall P. O.
Maryland 21128

Dear Mr. Rye:

Thank you for your comments regarding the U.S. Route 1 project from Silver Spring Road to MD 152.

Your comment that bypasses are needed instead of widening U.S. Route 1 has been noted. Your comments and suggestions have been included in the public hearing record for this project and they will receive serious consideration during the final decision making process for this project.

Perry Hall Boulevard from Honeygo Boulevard to Rossville Boulevard is currently under construction by Baltimore County. The County also have plans to extend Honeygo Boulevard and Gunview Road and to Belair Road and to widen Joppa Road. All these improvements were taken into consideration in determining the future traffic volumes on Belair Road. The projected traffic volumes for the design year 2015 indicate the need for widening of U.S. Route 1.

Your name has been added to our project mailing list and you will be notified of our final decision.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Office of Planning and
Preliminary Engineering

by: Sue Rajan
Sue Rajan
Project Manager

LHE:SR:ds

cc: Mr. C. R. Olsen (w/attach.)
Mr. C. E. Utermohle (w/attach.)

VII.D-61

My telephone number is (301) 333-1138

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

PROJECT DEVELOPMENT
DEC 13 11 25 AM '88

CONTRACT NO. B 813-101-471

U.S. ROUTE 1

SILVER SPRING ROAD

TO

MARYLAND RTE 152

COMBINATION LOCATION / DESIGN PUBLIC HEARING

DECEMBER 8, 1988

NAME KATHY + TOM KITKO DATE 12/2/88

PLEASE PRINT

ADDRESS 1900 Moore Rd

CITY/TOWN Forest Hill STATE MD ZIP CODE 21050

I/We wish to comment or inquire about the following aspects of the project:

We believe it will be advantageous to widen Rte. 1 from Silver Spring Rd. to Chapel Rd; possibly adding a left turn lane in from Chapel Rd. past Northview Shop. Ctr. (Santoni's).

The traffic north of Chapel Road thins out and widening the road from north of Santoni's to Rte. 152 is unnecessary.

We travel Rte. 1 several times a week for the past 15 years and are aware of the fact the traffic moves @ 50 mph from Rte 152 (north & south) until the speed limit drops to 40 mph around Forge Road & we are speaking of rush hour (4pm-6pm)

Therefore, we are strongly against widening Rte. 1 from Chapel Rd to Rte. 152.

Please add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

P.S. We would like to know if sewage will be put in if the road is widened from Chapel Rd. to Rte. 152.

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.



**Maryland Department of Transportation
State Highway Administration**

3910
Richard H. Trainor
Secretary
Hal Kassoff
Administrator

April 12, 1989

RE: Contract No. B 813-101-471
U.S.1 Belair Road from
Silver Spring Road to MD 152

Mr. & Mrs. Tom Kitko
1900 Moore Road
Forest Hill, Maryland 21050

Dear Mr. & Mrs. Kitko:

Thank you for your comments regarding the U S Route 1 project from Silver Spring Road to MD 152. Your comments and suggestions have been included in the public hearing record for this project and will receive serious consideration during the final decision making process for this project.

Under the Six Lane Alternate, construction would occur initially from Silver Spring Road to Pinedale Drive. The construction for the rest of the project would occur only when the need arises and in consultation with the local elected officials. Receiving location approval for six lanes for the entire length of the project would allow us to preserve the right of way for future use.

At this time, Baltimore County or Harford County have no plans to extend the sewer system to the area between Chapel Road and MD 152. For further information regarding this matter, please contact the above counties.

Thank you again for your comments. We appreciate your interest in this project.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Office of Planning and
Preliminary Engineering

by: Sue Rajan
Sue Rajan
Project Manager

LHE:SR:ds
cc: Mr. C. R. Olsen
Mr. C. E. Utermohle

VII.D-63

My telephone number is (301) 333-1138

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

PROJECT DEVELOPMENT
DIVISION

291

CONTRACT NO. B 813-101-471

U.S. ROUTE 1

SILVER SPRING ROAD

TO

MARYLAND RTE 152

DEC 13 11 24 AM '88

COMBINATION LOCATION / DESIGN PUBLIC HEARING

DECEMBER 8, 1988

NAME Jack L. Knapp / Sr DATE 11-25-88

PLEASE PRINT

ADDRESS 4684 Norrisville Rd

CITY/TOWN Whitehall STATE Md. ZIP CODE 21161

I/We wish to comment or inquire about the following aspects of the project:

As my parent's are located in the study area and I will be assisting their decision as their ages restrict them in participation I am requesting to be added to mailing list

Please add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

VII.D-64

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.

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STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

PROJECT
DEVELOPMENT
DIVISION

CONTRACT NO. B 813-101-471

U.S. ROUTE 1
SILVER SPRING ROAD
TO
MARYLAND RTE 152

DEC 15 11 25 AM '88

COMBINATION LOCATION / DESIGN PUBLIC HEARING
DECEMBER 8, 1988

NAME OLIVER J. STIFLER DATE 12/13/1988

PLEASE
PRINT

ADDRESS 500 RECKORD RD

CITY/TOWN FALLSTON STATE MD. ZIP CODE 21047

I/We wish to comment or inquire about the following aspects of the project:

Multiple horizontal lines for handwritten input.

- Please add my/our name(s) to the Mailing List.*
- Please delete my/our name(s) from the Mailing List.

VII.D-65

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.

STATE HIGHWAY ADMINISTRATION
QUESTIONS AND/OR COMMENTS

CONTRACT NO. B 813-101-471

U.S. ROUTE 1

SILVER SPRING ROAD

TO

MARYLAND RTE 152

PROJECT DEVELOPMENT DIVISION

DEC 19 11 25 AM '88

400

COMBINATION LOCATION / DESIGN PUBLIC HEARING
DECEMBER 8, 1988

NAME ALBERT W. ROGERS DATE 11/23/88

PLEASE PRINT

ADDRESS 905 BALTIMORE PIKE

CITY/TOWN BEL AIR STATE MARYLAND ZIP CODE 21014

I/We wish to comment or inquire about the following aspects of the project:

Lined area for handwritten comments or inquiries.

Please add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

VII.D-67

*Persons who have received a copy of this brochure through the mail are already on the project mailing list.

VIII. LIST OF PREPARERS

VIII. LIST OF PREPARERS

This Final Environmental Impact Statement was prepared by the Maryland Department of Transportation, State Highway Administration in consultation with the Federal Highway Administration. The following personnel were instrumental in the preparation of this document:

STATE HIGHWAY ADMINISTRATION

Project Development Division:

| | |
|---------------------------|---------------------------------|
| Ms. Sue Rajan | Project Manager |
| Ms. Cynthia Simpson | Chief, Environmental Management |
| Mr. Dennis Simpson | Highway Engineer |
| Ms. Barbara Allera-Bohlen | Environmental Manager |

Bureau of Highway Statistics:

| | |
|--------------------|---------------------|
| Mr. Robert Lambdin | Traffic Forecasting |
|--------------------|---------------------|

CONSULTANT:

| | |
|-------------------------------|-------------------------|
| Mr. Charles E. Utermohle, III | Kidde Consultants, Inc. |
| Mr. David L. Manly | Kidde Consultants, Inc. |

FEDERAL HIGHWAY ADMINISTRATION:

| | |
|---------------------|--------------------------|
| Mr. Paul Wettlaufer | Environmental Specialist |
|---------------------|--------------------------|

IX. APPENDICES

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APPENDIX IX-1

MAMMALS OBSERVED OR EXPECTED TO OCCUR IN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|----------------------------|--|
| Opossum | <u>Didelphis marsupialis virginiana</u> |
| Masked Shrew | <u>Sorex cinereus fontinalis</u> |
| Pygmy Shrew | <u>Microsorex hoyi winnemana</u> |
| Least Shrew | <u>Cryptotis parva</u> |
| Shorttail Shrew | <u>Blarina brevicauda</u> |
| Eastern Mole | <u>Scalopus aquaticus aquaticus</u> |
| Star-nosed Mole | <u>Condylura cristata cristata</u> |
| Little Brown Myotis | <u>Myotis lucifugus lucifugus</u> |
| Keen's Myotis | <u>M. keenii septentrionalis</u> |
| Small-footed Myotis | <u>M. subulatus leibii</u> |
| Silver Haired Bat | <u>Lasionycteris noctivagans</u> |
| Eastern Pipistrelle | <u>Pipistrellus subflavus subflavus</u> |
| Big Brown Bat | <u>Eptesicus fuscus fuscus</u> |
| Red Bat | <u>Lasiurus borealis borealis</u> |
| Evening Bat | <u>Nycticeius humeralis humeralis</u> |
| *Eastern Cottontail Rabbit | <u>Sylvilagus floridanus malluras</u> |
| *Eastern Chipmunk | <u>Tamias striatus fisheri</u> |
| Red Squirrel | <u>Tamiasciurus hudsonicus loquax</u> |
| *Grey Squirrel | <u>Sciurus carolinensis pennsylvanicus</u> |
| Fox Squirrel | <u>S. niger vulpinus</u> |
| Southern Flying Squirrel | <u>Glaucomys volans volans</u> |
| *Woodchuck | <u>Marmota monax</u> |
| Beaver | <u>Castor canadensis</u> |
| Eastern Harvest Mouse | <u>Reithrodontomys humulis virginianus</u> |
| Whitefooted Mouse | <u>Peromyscus leucopus noveboracenia</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

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APPENDIX IX-1 (Continued)

MAMMALS OBSERVED OR EXPECTED TO OCCUR IN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|----------------------|--|
| Wood Rat | <u>Neotoma floridana magister</u> |
| Meadow Vole | <u>Microtus pennsylvanicus pennsylvanicus</u> |
| Pine Vole | <u>Pitymys pinetorum scalopsoides</u> |
| Muskrat | <u>Ondatra zibethicus marodon</u> |
| Norway Rat | <u>Rattus norvegicus</u> |
| House Mouse | <u>Mus musculus</u> |
| Meadow Jumping Mouse | <u>Zapus hudsonius americanus</u> |
| Red Fox | <u>Vulpes fulva</u> |
| Grey Fox | <u>Urocyon cinereoargenteus cinereoargenteus</u> |
| *Raccoon | <u>Procyon lotor lotor</u> |
| Long Tailed Weasel | <u>Mustela frenata</u> |
| Mink | <u>M. vison mink</u> |
| Skunk | <u>Mephitis mephitis nigra</u> |
| Otter | <u>Lutra canadensis lataxina</u> |
| *White-tailed Deer | <u>Odocoileus virginianus borealis</u> |
| Bobcat | <u>Lynx rufus rufus</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

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APPENDIX IX-2

BIRDS OBSERVED OR EXPECTED TO OCCUR WITHIN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|----------------------------|--------------------------------------|
| Pied-billed Grebe | <u>Podilymbus podiceps</u> |
| Great Blue Heron | <u>Ardea herodias</u> |
| Green Heron | <u>Butorides virescens virescens</u> |
| American Bittern | <u>Botaurus lentiginosus</u> |
| Canada Goose | <u>Branta canadensis</u> |
| Blue Goose | <u>Chen caerulescens</u> |
| Mallard | <u>Anas platyrhynchos</u> |
| Black Duck | <u>Anas rubripes</u> |
| Gadwall | <u>Anas strepera</u> |
| Blue Winged Teal | <u>Anas discors</u> |
| Baldpate | <u>Mareca americana</u> |
| Wood Duck | <u>Aix sponsa</u> |
| Ring-necked Duck | <u>Aythya collaris</u> |
| Canvasback | <u>Aythya valisineria</u> |
| Greater Scaup Duck | <u>Aythya marila</u> |
| American Goldeneye | <u>Glaucionetta clangula</u> |
| Buffle-head | <u>Glaucionetta albeola</u> |
| *Turkey Vulture | <u>Cathartes aura</u> |
| Black Vulture | <u>Coragyps atratus</u> |
| Goshawk | <u>Accipiter gentilis</u> |
| Sharp-shinned Hawk | <u>Accipiter striatus</u> |
| Cooper's Hawk | <u>Accipiter cooperii</u> |
| Red-tailed Hawk | <u>Buteo jamaicensis</u> |
| Red-shouldered Hawk (I.D.) | <u>Buteo lineatus</u> |
| Peregrin Falcon | <u>Falco peregrinus</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

(I.D.) = Interior dwelling species

4050

APPENDIX IX-2 (Continued)

BIRDS OBSERVED OR EXPECTED TO OCCUR WITHIN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|----------------------|----------------------------------|
| Broadwinged Hawk | <u>Buteo platypterus</u> |
| Marsh Hawk | <u>Circus cyaneus</u> |
| Osprey | <u>Pandion haliaetus</u> |
| Kestrel | <u>Falco sparverius</u> |
| Bob White | <u>Colinus virginianus</u> |
| Ring-necked Pheasant | <u>Phasianus colchicus</u> |
| Wild Turkey | <u>Meleagris gallopavo</u> |
| Virginia Kail | <u>Rallus limicola</u> |
| American Coot | <u>Fulica americana</u> |
| Killdeer | <u>Charadrius vociferus</u> |
| American Woodcock | <u>Philohela minor</u> |
| Spotted Sandpiper | <u>Actitis macularia</u> |
| Rock Dove | <u>Columba livia</u> |
| *Mourning Dove | <u>Zenaidura macroura</u> |
| Yellow-billed Cuckoo | <u>Coccyzus americanus</u> |
| Black-billed Cuckoo | <u>Coccyzus erythrophthalmus</u> |
| Barn Owl | <u>Tyto alba</u> |
| Screech Owl | <u>Otus asio</u> |
| Great Horned Owl | <u>Bubo virginianus</u> |
| Barred Owl (I.D.) | <u>Strix varia</u> |
| Short-eared Owl | <u>Asio flammeus</u> |
| Chuck-will's-widow | <u>Caprimulgus carolinensis</u> |
| Whippoorwill (I.D.) | <u>Caprimulgus vociferus</u> |
| Nighthawk | <u>Chordeiles minor</u> |
| Chimney Swift | <u>Chaetura pelagica</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

(I.D.) = Interior dwelling species.

409

APPENDIX IX-2 (Continued)

BIRDS OBSERVED OR EXPECTED TO OCCUR WITHIN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|----------------------------|-----------------------------------|
| Ruby-throated Hummingbird | <u>Achilochus colubris</u> |
| Belted Kingfisher | <u>Megaceryle alcyon</u> |
| Common Flicker | <u>Colaptes auratus</u> |
| Pileated Woodpecker (I.D.) | <u>Dryocopus pileatus</u> |
| Red-Bellied Woodpecker | <u>Centurus carolinus</u> |
| Red-headed Woodpecker | <u>Melanerpes erythrocephalus</u> |
| Hairy Woodpecker (I.D.) | <u>Dendrocopos villosus</u> |
| Downy Woodpecker | <u>Dendrocopos pubescens</u> |
| Eastern Kingbird | <u>Tyrannus tyrannus</u> |
| Crested Flycatcher | <u>Myiarchus crinitus</u> |
| Eastern Phoebe | <u>Sayornis phoebe</u> |
| Acadian Flycatcher (I.D.) | <u>Empidonax virens</u> |
| Willow Flycatcher | <u>Empidonax traillii</u> |
| Least Flycatcher | <u>Empidonax minimus</u> |
| Wood Pewee | <u>Contopus virens</u> |
| Horned Lark | <u>Eremophila alpestris</u> |
| Tree Swallow | <u>Iridoprocne bicolor</u> |
| Bank Swallow | <u>Riparia riparia</u> |
| Rough-winged Swallow | <u>Stelgidopteryx ruficollis</u> |
| Barn Swallow | <u>Hirundo rustica</u> |
| Purple Martin | <u>Progne subis</u> |
| *Blue Jay | <u>Cyanocitta cristata</u> |
| *Common Crow | <u>Corvus brachyrhynchos</u> |
| Fish Crow | <u>Corvus ossifragus</u> |
| Carolina Chickadee | <u>Parus carolinensis</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

(I.D.) = Interior dwelling species

410

APPENDIX IX-2 (Continued)

BIRDS OBSERVED OR EXPECTED TO OCCUR WITHIN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|-------------------------|---------------------------------|
| Tufted Titmouse | <u>Parus bicolor</u> |
| White-breasted Nuthatch | <u>Sitta carolinensis</u> |
| Brown Creeper | <u>Certhia familiaris</u> |
| House Wren | <u>Troglodytes aedon</u> |
| Winter Wren | <u>Troglodytes troglodytes</u> |
| Carolina Wren | <u>Thryothorus ludovicianus</u> |
| Marsh Wren | <u>Cistothorus palustris</u> |
| Mockingbird | <u>Mimus polyglottos</u> |
| *Catbird | <u>Dumetella carolinensis</u> |
| Brown Thrasher | <u>Toxostoma rufum</u> |
| *Robin | <u>Turdus migratorius</u> |
| Wood Thrush | <u>Hylocichla mustelina</u> |
| Hermit Thrush | <u>Hylocichla guttata</u> |
| Olive-backed Thrush | <u>Hylocichla ustulata</u> |
| Gray-cheeked Thrush | <u>Hylocichla miminua</u> |
| Veery | <u>Hylocichla fuscenscens</u> |
| Eastern Bluebird | <u>Sialia sialis</u> |
| Blue-gray Gnatcatcher | <u>Polioptila caerulea</u> |
| Golden-crowned Kinglet | <u>Regulus satrapa</u> |
| Ruby-crowned Kinglet | <u>Regulus calendula</u> |
| American Pipit | <u>Anthus spinoletta</u> |
| Cedar Waxwing | <u>Bombycilla cedrorum</u> |
| Northern Shrike | <u>Lanius excubitor</u> |
| *Starling | <u>Sturnus vulgaris</u> |
| White-eyed Vireo | <u>Vireo griseus</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

(I.D.) = Interior dwelling species

APPENDIX IX-2 (Continued)

410

BIRDS OBSERVED OR EXPECTED TO OCCUR WITHIN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|--------------------------------|-------------------------------|
| Yellowthroated Vireo (I.D.) | <u>Vireo flavifrons</u> |
| Blue-headed Vireo | <u>Vireo solitarius</u> |
| Red-eyed Vireo (I.D.) | <u>Vireo olivaceus</u> |
| Warbling Vireo | <u>Vireo gilvus</u> |
| Black and White Warbler (I.D.) | <u>Mniotilta varia</u> |
| Prothonotary Warbler (I.D.) | <u>Prothonotaria citrea</u> |
| Worm-eating Warbler (I.D.) | <u>Helmitheros vermivorus</u> |
| Golden-winged Warbler | <u>Vermivora chrysoptera</u> |
| Blue-winged Warbler | <u>Vermivora pinus</u> |
| Tennessee Warbler | <u>Vermivora peregrina</u> |
| Nashville Warbler | <u>Vermivora ruficapilla</u> |
| Parula Warbler | <u>Parula americana</u> |
| Yellow Warbler | <u>Dendroica petechia</u> |
| Magnolia Warbler | <u>Dendroica magnolia</u> |
| Black-throated Blue Warbler | <u>Dendroica caerulescens</u> |
| Myrtle Warbler | <u>Dendroica coronata</u> |
| Black-throated Green Warbler | <u>Dendroica virens</u> |
| Cerulean Warbler | <u>Dendroica cerulea</u> |
| Blackburnian Warbler | <u>Dendroica fusca</u> |
| Bay-breasted Warbler | <u>Dendroica castanea</u> |
| Black-poll Warbler | <u>Dendroica striata</u> |
| Pine Warbler | <u>Dendroica pinus</u> |
| Prairie Warbler | <u>Dendroica discolor</u> |
| Palm Warbler | <u>Dendroica palmarum</u> |
| Ovenbird | <u>Seiurus aurocapillus</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

(I.D.) = Interior dwelling species

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APPENDIX IX-2 (Continued)

BIRDS OBSERVED OR EXPECTED TO OCCUR WITHIN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|------------------------------|--------------------------------|
| Northern Waterthrush | <u>Seiurus noveboracensis</u> |
| Louisiana Waterthrush (I.D.) | <u>Seiurus motacilla</u> |
| Kentucky Warbler (I.D.) | <u>Oporornis formosus</u> |
| Connecticut Warbler | <u>Oporornis agilis</u> |
| *Yellow-throat | <u>Geothlypis trichas</u> |
| Yellow-breasted Chat | <u>Icteria virens</u> |
| Hooded Warbler (I.D.) | <u>Wilsonia citrina</u> |
| Wilson's Warbler | <u>Wilsonia pusilla</u> |
| Canada Warbler | <u>Wilsonia canadensis</u> |
| American Redstart (I.D.) | <u>Setophaga ruticilla</u> |
| *House Sparrow | <u>Passer domesticus</u> |
| Meadowlark | <u>Sturnella magna</u> |
| Red-wing | <u>Agelaius phoeniceus</u> |
| Orchard Oriole | <u>Icterus spurius</u> |
| Baltimore Oriole | <u>Icterus galbula</u> |
| *Common Grackle | <u>Quiscalus quiscula</u> |
| Cowbird | <u>Molothrus ater</u> |
| Scarlet Tanager (I.D.) | <u>Piranga olivacea</u> |
| Summer Tanager | <u>Piranga rubra</u> |
| *Cardinal | <u>Richmondia cardinalis</u> |
| Rose-breasted Grosbeak | <u>Pheucticus ludovicianus</u> |
| Blue Grosbeak | <u>Guiraca caerulea</u> |
| Indigo Bunting | <u>Passerina cyanea</u> |
| Dickcissel | <u>Spiza americana</u> |
| Evening Grosbeak | <u>Hesperiphona vespertina</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

(I.D.) = Interior dwelling species

APPENDIX IX-2 (Continued)

BIRDS OBSERVED OR EXPECTED TO OCCUR WITHIN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|----------------------------|----------------------------------|
| Purple Finch | <u>Carpodacus purpureus</u> |
| American Goldfinch | <u>Spinus tristis</u> |
| Towhee | <u>Pipilo erythrophthalmus</u> |
| Savannah Sparrow | <u>Passerculus sandwichensis</u> |
| Grasshopper Sparrow | <u>Ammodramus savannarum</u> |
| Vesper Sparrow | <u>Poocetes gramineus</u> |
| State-colored Junco | <u>Junco hyemalis</u> |
| Chipping Sparrow | <u>Spizella passerina</u> |
| Field Sparrow | <u>Spizella pusilla</u> |
| White-crowned Sparrow | <u>Zonotrichia leucophrys</u> |
| White-throated Sparrow | <u>Zonotrichia albicollis</u> |
| Fox Sparrow | <u>Passerella ilicaca</u> |
| Lincoln's Sparrow | <u>Melospiza lincolni</u> |
| Swamp Sparrow | <u>Melospiza georgiana</u> |
| Song Sparrow | <u>Melospiza melodia</u> |
| Green Heron | <u>Butorides virescens</u> |
| Yellow-crowned Night Heron | <u>Nyctanassa violacea</u> |
| Black-crowned Night Heron | <u>Nycticorax nycticorax</u> |
| Sora Rail | <u>Porzana carolina</u> |
| King Rail | <u>Rallus elegans</u> |
| Solitary Sandpiper | <u>Tringa solitaria</u> |
| Lesser Yellowlegs | <u>Totanus flavipes</u> |
| Greater Yellowlegs | <u>Totanus melanoleucus</u> |
| Common Snipe | <u>Capella gallinago</u> |
| Ring-billed Gull | <u>Larus delawarensis</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

(I.D.) = Interior dwelling species

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APPENDIX IX-2 (Continued)

BIRDS OBSERVED OR EXPECTED TO OCCUR WITHIN
THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|---------------------------|-------------------------------|
| Black Tern | <u>Chlidonias nigra</u> |
| Saw-whet Owl | <u>Aegolius acadica</u> |
| Yellow-bellied Sapsucker | <u>Sphyrapicus varius</u> |
| Yellow-bellied Flycatcher | <u>Empidonax flaviventris</u> |
| Alder Flycatcher | <u>Epidonax traillii</u> |
| Olive-sided Flycatcher | <u>Nuttallornis borealis</u> |

* Observed individuals or signs of their presence during on-site ecological reconnaissance.

(I.D.) = Interior dwelling species

APPENDIX IX-3

REPTILES AND AMPHIBIANS OBSERVED OR EXPECTED TO OCCUR WITHIN THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|-------------------------------|-------------------------------------|
| Red Spotted Newt | <u>Notophthalmus viridescens</u> |
| Spotted Salamander | <u>Ambystoma maculatum</u> |
| Marbled Salamander | <u>A. opacum</u> |
| Northern Two-lined Salamander | <u>Eurycea bielineata</u> |
| Longtailed Salamander | <u>E. longicauda</u> |
| Red Backed Salamander | <u>Plethodon cinereus</u> |
| Slimy Salamander | <u>P. glutinosus</u> |
| Northern Dusky Salamander | <u>Desmognathus fuscus</u> |
| American Toad | <u>Bufo americanus</u> |
| Northern Cricket Frog | <u>Acris crepitans</u> |
| Spring Peeper | <u>Hyla crucifer</u> |
| Green Treefrog | <u>H. cinerea</u> |
| Eastern Gray Treefrog | <u>H. versicolor</u> |
| Upland Chorus Frog | <u>Pseudacris triseriata</u> |
| Bull Frog | <u>Rana catesbeianan</u> |
| Green Frog | <u>R. clamitans</u> |
| Northern Leopard Frog | <u>R. pipens</u> |
| Pickerel Frog | <u>R. palustris</u> |
| Wood Frog | <u>R. sylvatica</u> |
| Northern Fence Lizard | <u>Sceloporus undulatus</u> |
| Broad Headed Skink | <u>Eumeces lapiceps</u> |
| Five-lined Skink | <u>E. fasciatus</u> |
| Eastern Worm Snake | <u>Carphophis amoenus</u> |
| Northern Ringneck Snake | <u>Diadophis punctatus edwardsi</u> |
| Northern Black Racer | <u>Coluber constrictor</u> |

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APPENDIX IX-3 (Continued)

REPTILES AND AMPHIBIANS OBSERVED OR EXPECTED TO
OCCUR WITHIN THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|----------------------------|----------------------------------|
| Black Rat Snake | <u>Elaphe obsoleta</u> |
| Eastern Milk Snake | <u>Lamprobettis doliata</u> |
| Northern Water Snake | <u>Natrix sipedon</u> |
| Northern Red-bellied Snake | <u>Storeria occipitomaculata</u> |
| Eastern Earth Snake | <u>Virginia valeriae</u> |
| Queen Snake | <u>Regina septemvittata</u> |
| Northern Brown Snake | <u>Storeria dekayi</u> |
| Eastern Ribbon Snake | <u>Thamnophis sauritus</u> |
| Garter Snake | <u>Thamnophis sirtalis</u> |
| Copperhead | <u>Agkistrodon contortrix</u> |
| Snapping Turtle | <u>Chelydra serpentina</u> |
| Box Turtle | <u>Terrapene carolina</u> |
| Spotted Turtle | <u>Clemmys guttata</u> |
| Eastern Painted Turtle | <u>Chrysemys picta picta</u> |
| Midland Painted Turtle | <u>C. p. marginata</u> |
| Wood Turtle | <u>Clemmys insculpta</u> |
| Red-bellied Turtle | <u>Pseudemys rubriventris</u> |
| Stinkpot Turtle | <u>Sternotherus odoratus</u> |

APPENDIX IX-4

FISHES OBSERVED OR EXPECTED TO OCCUR
 WITHIN THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|--------------------|--------------------------------|
| Alewife Herring | <u>Alosa pseudarengus</u> |
| Blueback Herring | <u>Alosa aestivalis</u> |
| White Perch | <u>Morone americana</u> |
| Yellow Perch | <u>Perca flavescens</u> |
| Blacknose Dace | <u>Rhinichthys atratulus</u> |
| Rosyside Dace | <u>Clinostomus funduloides</u> |
| White Sucker | <u>Castostomus commersoni</u> |
| Green Sunfish | <u>Lepomis cyanellus</u> |
| Creek Chub | <u>Semotilus atromaculatus</u> |
| Common Shiner | <u>Notropus cornutus</u> |
| Fantail Darter | <u>Etheostoma flabellare</u> |
| American Eel | <u>Anguilla rostrata</u> |
| Longnose Dace | <u>Rhinichthys cataractae</u> |
| Tessellated Darter | <u>Etheostoma olmstedii</u> |
| Brook Trout | <u>Salvelinus fontinalis</u> |
| Brown Trout | <u>Salma trutta</u> |
| Common Carp | <u>Cyprinus carpio</u> |
| Stoneroller | <u>Campostoma anomalum</u> |
| Cutlips Minnow | <u>Exoglossum maxillingua</u> |
| River Chub | <u>Nocomis micropogon</u> |
| Bluntnose Minnow | <u>Pimephales notatus</u> |

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APPENDIX IX-4 (Continued)

FISHES OBSERVED OR EXPECTED TO OCCUR
WITHIN THE U.S. ROUTE 1 STUDY CORRIDOR

| <u>Common Name</u> | <u>Scientific Name</u> |
|--------------------|-------------------------------|
| Spotfin Shiner | <u>Notropis spiloferus</u> |
| Northern Hogsucker | <u>Ilypentalium nigricans</u> |
| Mottled Sculpin | <u>Cottus bairdi</u> |
| Bluegill Sunfish | <u>Lepomis macrochirus</u> |
| Largemouth Bass | <u>Micropterus salmoides</u> |

SUMMARY OF WETLANDS FIELD VIEW

MEMORANDUM OF MEETING

TO: Dennis Simpson, Project Engineer
 FROM: Andrew C. Parker, Kidde Consultants
 DATE: October 1, 1987
 SUBJECT: U.S. Route 1 Wetlands Field Review
 KCI Job Order No. 01-86272-B 46068

In Attendance:

Steve Harmon
 Denise Clearwater
 Dennis Simpson
 Cheryl Banigan
 Andrew Parker

Army Corp of Engineers
 MD Dept. of Natural Resources
 MD State Highway Administration
 Kidde Consultants, Inc.
 Kidde Consultants, Inc.

Introduction

To open the meeting, Kidde Consultants explained the agenda for the field review. Attendees were given a copy of the delineation report which contained information about the vegetation, soils, and hydrologic characteristics of each wetland. The wetland sites were visited in numerical order, heading south through the corridor.

Rt W1

The Army Corps asked why there were two numbers representing the area impacted for each wetland. Kidde Consultants explained that in some areas construction easements extend beyond the right-of-way and the first number shows the total impact of the easement and right-of-way. The second number denotes only those wetland areas which fall within the right-of-way.

Upon inspection of the wetland all of the agencies agreed with the boundaries set by Kidde.

Rt 1 W2

The Army Corps asked about Storm Water Management in this area. The State Highway Administration answered that no storm water management plans will be made until final design

The Army Corps questioned the area north of the dirt road. The soil in this area however, was not hydric and the wetland boundary remained unchanged.

Rt 1 W3

No change to the boundary was made.

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Memorandum of Meeting
KCI Job Order No. 01-86272-B 46068
October 1, 1987
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Rt 1 W4

This wetland was viewed from the road and based Kidde's description of the area was not changed.

Rt 1 W5

Wetland five was viewed from the Little Gunpowder Bridge. All were in agreement with the boundaries of this wetland.

Rt 1 W6

DNR pointed out that water quality benefits should be specified for the wetlands. The wetland boundaries were unchanged.

Rt 1 W7

No change to the boundary was made.

Rt 1 W8

Both the Army Corps and DNR asked if the stream was natural. Kidde explained that the stream flowed from the hill above the wetland. The boundaries remained unchanged.

Rt 1 W9

No change to this boundary was made.

Rt 1 W10

No change to this boundary was made.

Rt 1 KFW1

No change to this boundary was made.

Rt 1 KCWI

This wetland was not visited, but everyone agreed with its boundaries based upon Kidde's description of the area.

Rt 1 W11

No change to this boundary was made.

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Rt 1 W12

DNR asked why this wetland was the only one with sediment trapping and nutrient retention functions. Kidde explained that the field above it was the only actively cultivated area. DNR stated that fields used as pasture lands should also be considered.

The boundary of the wetland was unchanged.

Rt 1 W13

Both the Army Corps and DNR asked about the wetlands on the westside of Rt 1. Kidde pointed out that the road will be widened to the east and therefore is not expected to impact this area.

All were in agreement with the boundaries of this wetland.

Additional Comments

The Army Corps pointed out that fish passage must be considered in the design of all culverts and bridges and that storm water management devises must be constructed on upland areas, and out of the wetlands.

ch

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Attachment for Environmental
Impact Documents
Revised: July 28, 1989
Relocation Assistance Division

"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 Public Law 100-17) and amendments as published in the Annotated Code of Maryland entitled Real Property Article Subtitle 2, Relocation and Assistance Sections 12-201 to 12-212. The Maryland Department of Transportation, State Highway Administration, Relocation Assistance Division, administers the Transportation 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 \$22,500 for owner-occupants and \$5,250 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 expense payments to persons, businesses, farms and non-profit organizations up to 50 miles. Actual moving expenses for residences include actual moving costs or a schedule moving expense payment, up to \$1,050.

The moving cost payments to businesses are broken down into several categories, which include actual moving expense payments, fixed payments "in lieu of" actual moving expenses, limited to \$20,000 and reestablishment expenses, limited to \$10,000. 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, limited to \$1,000, for a replacement site.

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The actual reasonable moving expenses may be paid for a move by a commercial mover or for a self-move. Payments for the actual reasonable expenses are limited to a 50 mile radius unless the agency determines a longer distance is necessary. The expenses claimed for actual cost commercial moves must be supported by firm bids and 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, usually lower than 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 elects to move or discontinue it's operation the payment shall consist of the lesser of:

The fair market value of the item for continued use at the displacement site, less the proceeds from its sale; or

The estimated cost of moving the item, but with no allowance for storage.

They are also entitled to reasonable cost incurred in attempting to sell an item that is not to be relocated.

If an item of personal property which is used as part of a business or farm operation is not moved but is promptly replaced with a substitute item that performs a comparable function at the replacement site, the displaced person is entitled to payment of the lesser of:

The cost of the substitute item, including installation costs at the replacement site, minus any proceeds from the sale or trade-in of the replaced item; or

The estimated cost of moving and reinstalling the replaced item but with no allowance for storage.

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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 \$1,000 nor more than \$20,000. 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 more than three other establishments 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. The business is not operated at the displacement site or dwelling solely for the purpose of renting such dwelling or site to others.

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, or certified financial statements, 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 \$1,000 to a maximum of \$20,000, based upon the net income of the farm, provided that the farm has been relocated or the partial acquisition caused a substantial change in the nature of the farm. 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, a payment in the amount of \$1,000 to \$20,000 based on gross annual revenues less administrative expenses.

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

In the event comparable replacement housing is not available to rehouse persons displaced by public projects or that available replacement housing is beyond their financial means, replacement "housing as a last resort" will be utilized to accomplish the rehousing. Detailed studies 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.

U.S. Department of Agriculture

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FARMLAND CONVERSION IMPACT RATING

| | | | |
|--|-------------------|--|---|
| PART I (To be completed by Federal Agency) | | Date Of Land Evaluation Request February 2, 1989 | |
| Name Of Project U.S. Route 1 | | Federal Agency Involved Federal Highway Administration | |
| Proposed Land Use Widening and Safety Improvements | | County And State Harford County, Maryland | |
| PART II (To be completed by SCS) | | Date Request Received By SCS February 3, 1989 | |
| 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 <input type="checkbox"/> No <input checked="" type="checkbox"/> | Acres Irrigated None |
| Major Crop(s) Corn, Small Grain, Hay, Soybeans | | Farmable Land In Govt. Jurisdiction Acres: 151,300 % 62.0 | Average Farm Size 148 |
| Name Of Land Evaluation System Used Harford County Land Evaluation System | | Name Of Local Site Assessment System Use FPPA Systems | Amount Of Farmland As Defined in FPPA Acres: 128,100 %84.7 |
| | | | Date Land Evaluation Returned By SCS February 21, 1989 |
| PART III (To be completed by Federal Agency) | | Alternative Site Rating | |
| | | Site A | Site B |
| A. Total Acres To Be Converted Directly | | 8.158 | |
| B. Total Acres To Be Converted Indirectly | | 0.000 | |
| C. Total Acres In Site | | 8.158 | |
| PART IV (To be completed by SCS) Land Evaluation Information | | | |
| A. Total Acres Prime And Unique Farmland | | 2.6 | |
| B. Total Acres Statewide And Local Important Farmland | | 0.3 | |
| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted | | 0.002 | |
| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value | | 43.3 | |
| PART V (To be completed by SCS) Land Evaluation Criterion | | | |
| Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points) | | 83 | |
| PART VI (To be completed by Federal Agency) | | | |
| Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b)) | Maximum Points | | |
| 1. Area In Nonurban Use | 15 | 10 | |
| 2. Perimeter In Nonurban Use | 10 | 3 | |
| 3. Percent Of Site Being Farmed | 20 | 5 | |
| 4. Protection Provided By State And Local Government | 20 | 20 | |
| 5. Distance From Urban Builtup Area | 0 | 0 | |
| 6. Distance To Urban Support Services | 0 | 0 | |
| 7. Size Of Present Farm Unit Compared To Average | 10 | 10 | |
| 8. Creation Of Nonfarmable Farmland | 25 | 0 | |
| 9. Availability Of Farm Support Services | 5 | 0 | |
| 10. On-Farm Investments | 20 | 0 | |
| 11. Effects Of Conversion On Farm Support Services | 25 | 0 | |
| 12. Compatibility With Existing Agricultural Use | 10 | 10 | |
| TOTAL SITE ASSESSMENT POINTS | 160 | 58 | |
| PART VII (To be completed by Federal Agency) | | | |
| Relative Value Of Farmland (From Part V) | 100 | 83 | |
| Total Site Assessment (From Part VI above or a local site assessment) | 160 | 58 | |
| TOTAL POINTS (Total of above 2 lines) | 260 | 141 | |
| Site Selected: A | Date Of Selection | Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | |
| Reason For Selection: | | | |

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FARMLAND CONVERSION IMPACT RATING

| | | |
|--|--|--|
| PART I (To be completed by Federal Agency) | | Date Of Land Evaluation Request February 2, 1989 |
| Name Of Project U.S. Route 1 | Federal Agency Involved Federal Highway Administration | |
| Proposed Land Use Widening and Safety Improvements | County And State Baltimore County, Maryland | |
| PART II (To be completed by SCS) | | Date Request Received By SCS 3/24/89 |

| | | | |
|--|--|--|---------------------------------|
| 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> | Acres Irrigated None | Average Farm Size 126 |
| Major Crop(s) Corn, Small Grain, Soybeans, Hay | Farmable Land In Govt. Jurisdiction Acres: 195,200 % 51 | Amount Of Farmland As Defined in FPPA Acres: 154,000 % 40.3 | |
| Name Of Land Evaluation System Used Balt. Co. Land Eval. | Name Of Local Site Assessment System Use FPPA System | Date Land Evaluation Returned By SCS 3/30/89 | |

| PART III (To be completed by Federal Agency) | Alternative Site Rating | | | |
|--|-------------------------|--------|--------|--------|
| | Site A | Site B | Site C | Site D |
| A. Total Acres To Be Converted Directly | 51.531 | | | |
| B. Total Acres To Be Converted Indirectly | 0.000 | | | |
| C. Total Acres In Site | 51.531 | | | |

| PART IV (To be completed by SCS) Land Evaluation Information | |
|--|-------------|
| A. Total Acres Prime And Unique Farmland | 8.8 |
| B. Total Acres Statewide And Local Important Farmland | 13.5 |
| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted | .014 |
| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value | 47 |

| PART V (To be completed by SCS) Land Evaluation Criterion | |
|---|-----------|
| Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points) | 78 |

| PART VI (To be completed by Federal Agency) | | Maximum Points | | | |
|---|------------|----------------|--|--|--|
| Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b)) | | | | | |
| 1. Area In Nonurban Use | 15 | 6 | | | |
| 2. Perimeter In Nonurban Use | 10 | 4 | | | |
| 3. Percent Of Site Being Farmed | 20 | 1 | | | |
| 4. Protection Provided By State And Local Government | 20 | 20 | | | |
| 5. Distance From Urban Builtup Area | 0 | 0 | | | |
| 6. Distance To Urban Support Services | 0 | 0 | | | |
| 7. Size Of Present Farm Unit Compared To Average | 10 | 10 | | | |
| 8. Creation Of Nonfarmable Farmland | 25 | 0 | | | |
| 9. Availability Of Farm Support Services | 5 | 2 | | | |
| 10. On-Farm Investments | 20 | 5 | | | |
| 11. Effects Of Conversion On Farm Support Services | 25 | 0 | | | |
| 12. Compatibility With Existing Agricultural Use | 10 | 10 | | | |
| TOTAL SITE ASSESSMENT POINTS | 160 | 57 | | | |

| PART VII (To be completed by Federal Agency) | | | | | |
|---|------------|------------|--|--|--|
| Relative Value Of Farmland (From Part V) | 100 | 78 | | | |
| Total Site Assessment (From Part VI above or a local site assessment) | 160 | 57 | | | |
| TOTAL POINTS (Total of above 2 lines) | 260 | 135 | | | |

| | | |
|----------------|-------------------|---|
| Site Selected: | Date Of Selection | Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/> |
|----------------|-------------------|---|

Reason For Selection:



United States
Department of
Agriculture

Soil
Conservation
Service

1208 CHURCHVILLE ROAD, SUITE 201
BEL AIR, MARYLAND 21014

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February 21, 1989

Mr. Andrew C. Parker
Environmental Scientist
Kidde Consultants, Inc.
1020 Cromwell Bridge Road
Baltimore, Maryland 21204

RE: Farmland Conversion Impact Rating (AD-1006)
US Route 1
KCI Job Order No. 01-86272-B

Dear Mr. Parker:

As requested in your transmittal of the revised Farmland Conversion Impact Rating Form AD-1006 and related maps, dated February 2, 1989, our office has correlated the project with soil maps and completed the SCS portions of the form.

For clarification purposes:

1. The percent of "Farmland as defined in FPPA" was taken as a percentage of the total "Farmable Land in Government Jurisdiction."
2. Part IV C - Percent of Prime and Statewide Important Farmlands to be converted is taken as a percentage of the total "Farmland as defined in FPPA" acreage.
3. Part IV D - Percent of Farmland with same or higher relative value is taken as a percentage of the total "Farmland as defined in FPPA" acreage.

If I can be of further assistance, please do not hesitate to contact me at (301) 838-6181.

Sincerely,

Michael K. Shockley
District Conservationist

Enclosure

cc: Jeff Loser, SCS, State Resource Conservationist, Annapolis, Maryland



The Soil Conservation Service
is an agency of the
Department of Agriculture

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APPENDIX IX-8

WATER QUALITY FOR GUNPOWDER RIVER BASIN

Water Quality Characteristics

From 1980 to 1984 water quality characteristics of the basin were sampled at 79 stations on 43 streams. The following table is a cumulative summary of water quality data collected within the basin since 1974.

TABLE IX-1

Cumulative Summary of Water Quality Sampling in the Gunpowder River Basin, 1974-1984

| <u>Parameter</u> | <u>Samples</u> | <u>Range</u> |
|-------------------|----------------|--|
| pH | 369 | 6.2 - 9.0 |
| Total hardness | 212 | 10 - 342 mg/l |
| Alkalinity | 207 | 9.6 - 240 mg/l |
| Conductivity | 343 | 20 - 470 mg/l |
| Water temperature | 307 | 28 C (7-15-80 @ 1145 hrs.) - 0 C (2-3-81) |

From: Final Report for Federal-Aid Project F-36-R, Survey, Inventory and Management of Maryland's Cold Water Fishery Resource, DNR, 1985.

APPENDIX IX-9

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