Report Number: FHWA-MD-4-F-99-01-D

Federal Highway Administration

MD 201 / MD 212 Intersection Improvements

Prince Georges County, Maryland

Administrative Action

Draft Section 4(f) Evaluation

U.S. Department of Transportation
Federal Highway Administration
and
State of Maryland
Department of Transportation
State Highway Administration

Submitted Pursuant to: 49 U.S.C. 303(c) and 16 U.S.C. 470

June, 1999

Report Number: FHWA- MD-4-F-99-01-D

Federal Highway Administration

MD 201 (Edmonston Road) / MD 212 (Powder Mill Road)
Intersection Improvement Project
Prince George's County, Maryland

ADMINISTRATIVE ACTION

SECTION 4(f) EVALUATION

U.S. Department of Transportation
Federal Highway Administration

and

State of Maryland
Department of Transportation
State Highway Administration

SUBMITTED PURSUANT TO: 49 U.S.C. 303 (c) and 16 U.S.C. 470

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6/14/99
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6/14/99
Date

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I. INTRODUCTION

Under Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 USC 303 (c)), the Federal Highway Administration (FHWA) cannot approve any projects that require use of significant publicly-owned land from a public park, recreation area, wildlife and waterfowl refuge, or historic site that is on or eligible for the National Register of Historic Places unless 1) there is no feasible and prudent alternative to the use of such land, and 2) that the proposed action includes all possible planning to minimize harm to the protected property resulting from this use. This document has been prepared in accordance with 23 CFR 771.135 and 49 U.S.C. 303 and is consistent with the criteria for a Section 4 (f) Evaluation discussed therein.

This evaluation was prepared for the MD 201 (Edmonston Road)/MD 212 (Powder Mill Road) intersection improvements located near Beltsville in Prince George's County, Maryland (***Figure 1***). The preferred alternative proposes widening and resurfacing on both MD 201 and MD 212. The requirements of Section 4(f) apply because the preferred alternative would require use of the Beltsville Agricultural Research Center (BARC) land, which has been determined National Register eligible. BARC is owned by the Department of Agriculture, and is the world's premiere agricultural proving ground. The preferred alternative would also have an adverse effect upon a drainage feature in the northeast intersection quadrant, which is a contributing historic structure to the BARC property.

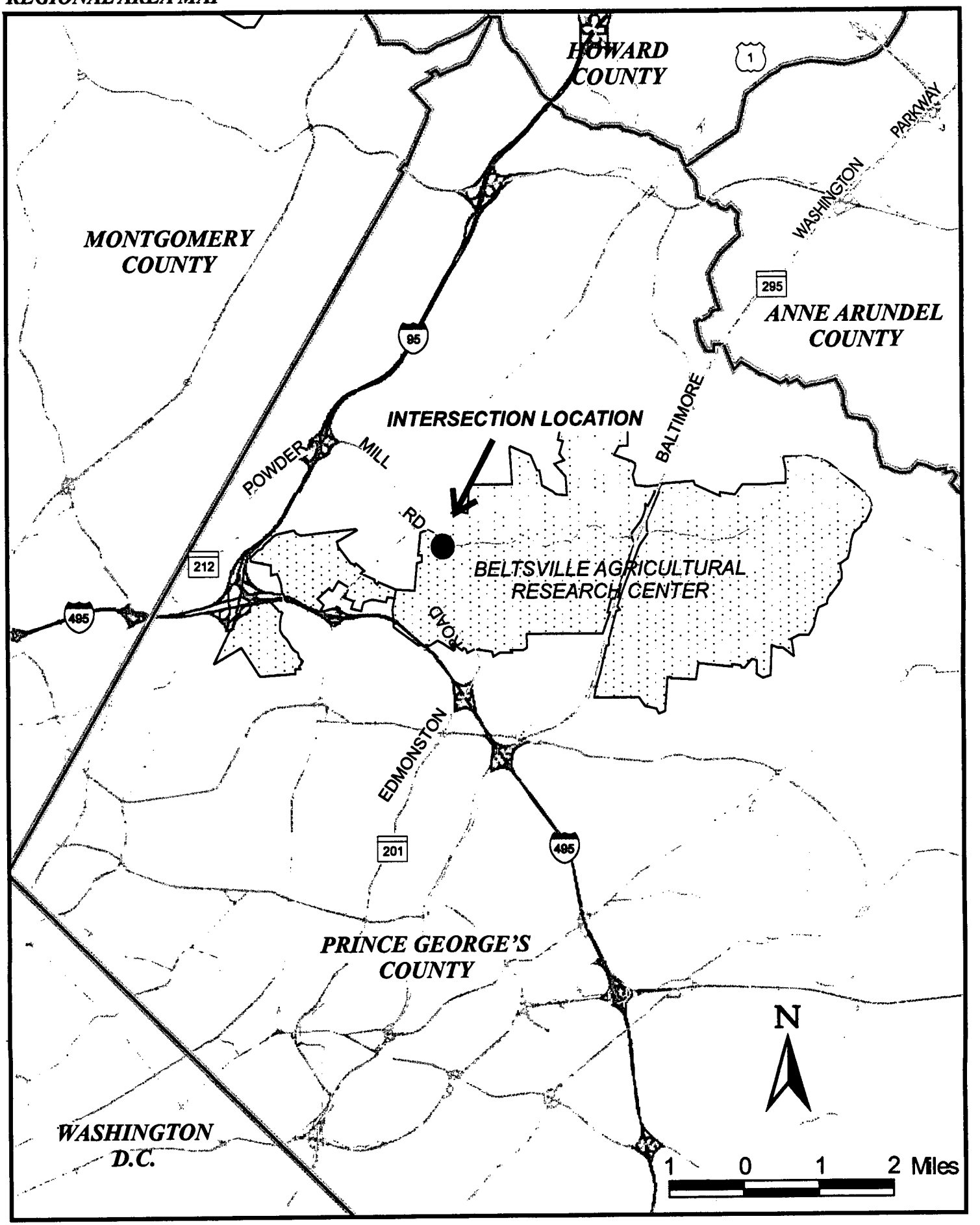
The proposed work would provide a benefit to the property by improving drainage and eliminating a substandard curvature on MD 212 that has caused some vehicles to hit the historic stone entrance gates on the BARC property. This improvement requires removal of a historic masonry cistern. Widening MD 212 to the north would allow for flattening this curve and improving operation and safety.

Based on impacts to the BARC property, The Maryland Historic Trust (MHT) concurred with the Maryland State Highway Administration (see MHT letter, January 29, 1999) that the proposed improvements to MD 201 at MD 212 will have an adverse effect on historic resources.

II. PURPOSE AND NEED FOR THE PROJECT

The MD 201/MD 212 intersection falls within the corridor identified for the proposed Inter-county Connector (ICC). Lack of consensus upon a highway alignment prompted the need for a reevaluation of short- and long-term solutions for addressing this area's traffic congestion problems. The Congestion Relief Study (CRS) was a comprehensive intersection analysis conducted within the ICC study area with the goal of immediately improving congestion at some of Prince George's and Montgomery Counties' busiest intersections. The CRS recommended the MD 201/MD 212 intersection for immediate short-term improvement.

FIGURE I
REGIONAL AREA MAP



The requirements for candidate intersections is that they be within the ICC study area, have at least one intersecting state route, and currently operate at an AM or PM peak hour level of service (LOS) E or F. Traffic analysis conducted at the MD 201/MD 212 intersection established that this intersection currently operates at a LOS F during both the AM and PM peak hours. Five different design concepts, in addition to the No-Build Alternative, were developed to improve the peak hour LOS to D or better. Each of these alternatives are described in Section VI of this report. Additional project goals include improving safety conditions and alleviating intersection flooding.

III. DESCRIPTION OF PROPOSED ACTION

A. Description of Project Site

BARC owns land in the northeast, southeast and southwest quadrants of the intersection. Land use in the northeast and southeast quadrants consists of open, agricultural fields. Land use in the southwest quadrant consists of forestland, including forested wetlands, and is part of the Linkage Farm. Land in the northwest quadrant is privately-owned, with land use consisting of the Beltsville Masonic Temple immediately at the intersection and residential development fronting MD 201, approximately 500 feet north of the intersection.

The 100-year floodplain associated with an Indian Creek tributary extends through the entire intersection area, encompassing portions of all four quadrants. The main drainage structure is a "Y"-shaped culvert that extends under the intersection and drains from the eastern quadrants to the outfall in the southwest quadrant. A cistern drop structure in the northeast intersection quadrant, which is a contributing historic structure to the BARC property, would be affected by the preferred alternative (Alternative 6).

B. Existing Intersection Conditions

MD 201 and MD 212 are classified as urban minor arterial roadways. The posted speed limit on MD 201 is 35 mph northbound and 40 mph southbound. The posted speed limit on MD 212 is 30 mph westbound and 35 mph eastbound. The 1997 average daily trips (ADT) for MD 201 and MD 212 are 27,800 and 16,600, respectively. The intersection currently operates at a LOS F during both the AM and PM peak hours. Significant increases in traffic volumes and geometric constraints at the intersection have caused the current traffic congestion and safety conditions.

The following lane configurations exist at each of the intersection quadrants of the MD 201/MD 212 intersection ***(Figure 2)***:

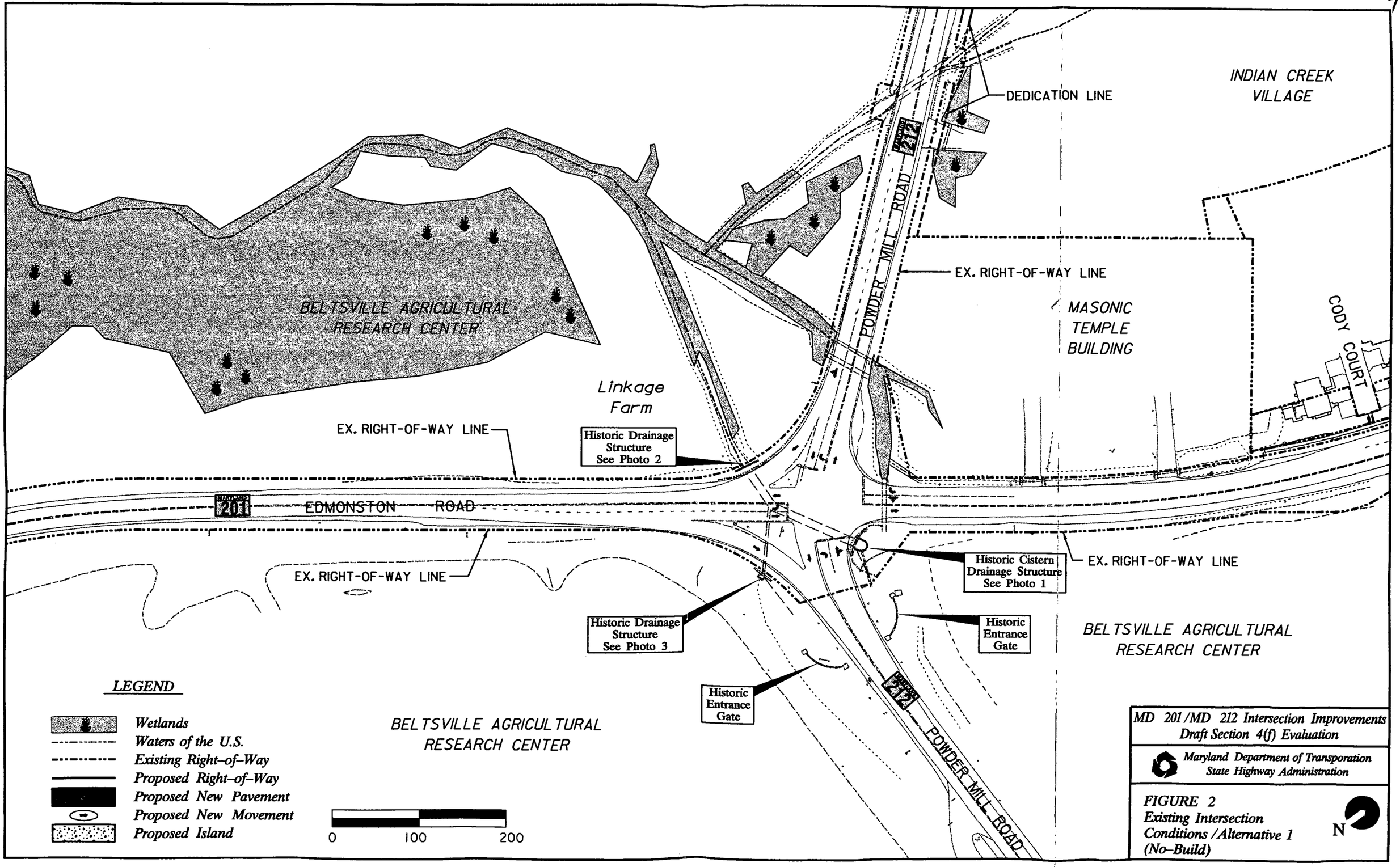
- Northbound MD 201 - one left, one through and one right turn lane.
- Southbound MD 201 - one dedicated right turn lane and one left-through lane.
- Eastbound MD 212 - one dedicated left turn lane, a right turn movement and a through lane.
- Westbound MD 212 - one dedicated left turn lane, a through lane and a right turn lane.

Accident data for the study period of 1995 to September 1998 show a total of 10 accidents that occurred at this intersection. The most prevalent probable cause was failure to yield right-of-way. Although this intersection was not identified as a High Accident Intersection during this period, the increase in projected traffic volumes can be expected to increase the frequency of accidents.

This intersection has several drainage structures that occur in all four intersection quadrants. The main drainage structure is a "Y" shaped concrete box culvert that extends from inlets in the northeast and southeast quadrants to the outlet in the southwest quadrant. Drainage structures are located in all four of the intersection quadrants. Contributing historic structures are located on BARC property, in the northeast, southeast and southwest quadrants ***(see Figure 2 and Photos 1 through 3)***.

Past intersection improvements to address traffic congestion have been inhibited by the main "Y"-shaped drainage structure at this intersection. The previous design for the extension of Edmonston Road remained within limits imposed by the "Y" shaped structure. The resulting intersection geometry has a sharp bend. This sharp bend is conducive to accidents, makes it difficult for turning trucks, and is not adequate for existing and future traffic volumes at this intersection.

Although drainage structures are located in all intersection quadrants, high flood stages adversely impact this intersection with up to one foot of water. Frequent storms have high flood stages that create an adverse tailwater condition to all of the intersection culverts. Only the most frequent storms with light rainfalls will allow storm runoff to flow through the drainage structures without flooding the intersection. Modifications to drainage structures have occurred at different times since the original 1938 drainage design, but the existing drainage structures cannot handle the heavy storm runoff events that occur. An increase in storm runoff, due to heavy development in the Indian Creek floodplain, has caused the flooding. Proposed improvements to the intersection include modification of the main 'Y" shaped culvert to meet the intersection's hydrology needs.


BELTSVILLE AGRICULTURAL RESEARCH CENTER
Linkage Farm
EX. RIGHT-OF-WAY LINE
Historic Drainage Structure See Photo 2
DEDICATION LINE
INDIAN CREEK VILLAGE
POWDER MILL ROAD
212
EX. RIGHT-OF-WAY LINE
MASONIC TEMPLE BUILDING
CODY COURT
201
EDMONSTON ROAD
EX. RIGHT-OF-WAY LINE
Historic Cistern Drainage Structure See Photo 1
EX. RIGHT-OF-WAY LINE
Historic Drainage Structure See Photo 3
Historic Entrance Gate
BELTSVILLE AGRICULTURAL RESEARCH CENTER
Historic Entrance Gate
212
POWDER MILL ROAD
LEGEND
Wetlands
Waters of the U.S.
Existing Right-of-Way
Proposed Right-of-Way
Proposed New Pavement
Proposed New Movement
Proposed Island
BELTSVILLE AGRICULTURAL RESEARCH CENTER
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MD 201/MD 212 Intersection Improvements
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FIGURE 2
Existing Intersection Conditions /Alternative 1 (No-Build)
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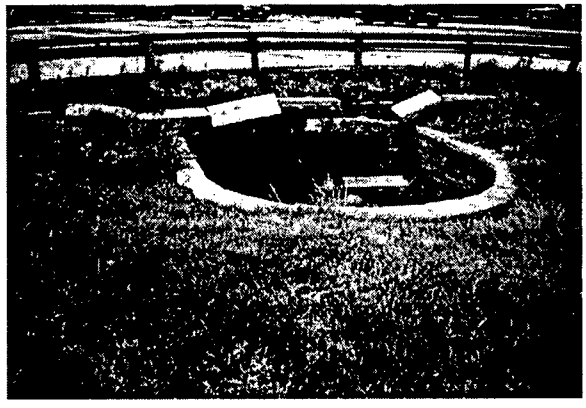

Photo 1 – Northeast Quadrant

Photo 2 – Southwest Quadrant

Photo 3 – Southeast Quadrant

C. Preferred Alternative (Alternative 6)

The capacity and level of service analyses for the MD 201/MD 212 intersection defines the number of lanes and the lane storage lengths required to provide an acceptable level of service. Several options were considered to improve existing traffic conditions at the intersection. The two primary options for widening included widening MD 201 to the east or west and widening MD 212 to the north or south. It is desirable for traffic operation and safety to widen consistently to one side for each roadway to avoid lane shifts through the intersection.

The preferred alternative proposed improvements for this intersection include adding a southbound through lane to MD 201 and adding a MD 212 eastbound right turn lane ***(Figure 3)***. Based on the critical lane analysis, the proposed improvements would result in a LOS B for the AM peak and LOS C for the PM peak. The design speed for this project would be 35 mph with an anticipated posted speed of 35 mph.

In addition to clearly meeting the project purpose and need of improving the peak hour LOS to D or better, this alternative would also provide additional benefits by meeting the two other goals identified for this project:

- Improve safety conditions at the intersection by flattening the existing curvature on MD 212, and

- Alleviate flooding at the intersection by modifying the existing drainage structure at the intersection in order to accommodate the increased stormwater runoff.

The preferred alternative for the intersection improvements includes widening east of MD 201 and north of MD 212 ***(see Figure 3)***. MD 201 widening will provide for an additional southbound through lane. Widening and resurfacing improvements on MD 201 extend 900 feet south and 600 feet north of the intersection. MD 212 widening will provide for dedicated eastbound through and right turn lanes. This widening will also allow for a westbound right turn movement. Widening and resurfacing improvements on MD 212 extend 550 feet west and 650 feet east of the intersection.

This alternative would also improve safety conditions by flattening the existing curvature on MD 212 to improve a substandard alignment. Drainage problems would also be addressed by relocating and enlarging the cistern structure to accommodate more runoff, thus alleviating the flooding problem.

This alternative is the only alternative under consideration that meets the project purpose and need of improving peak hour LOS to D or better while also meeting the other two goals identified for this project. This alternative would require use of BARC property and would also

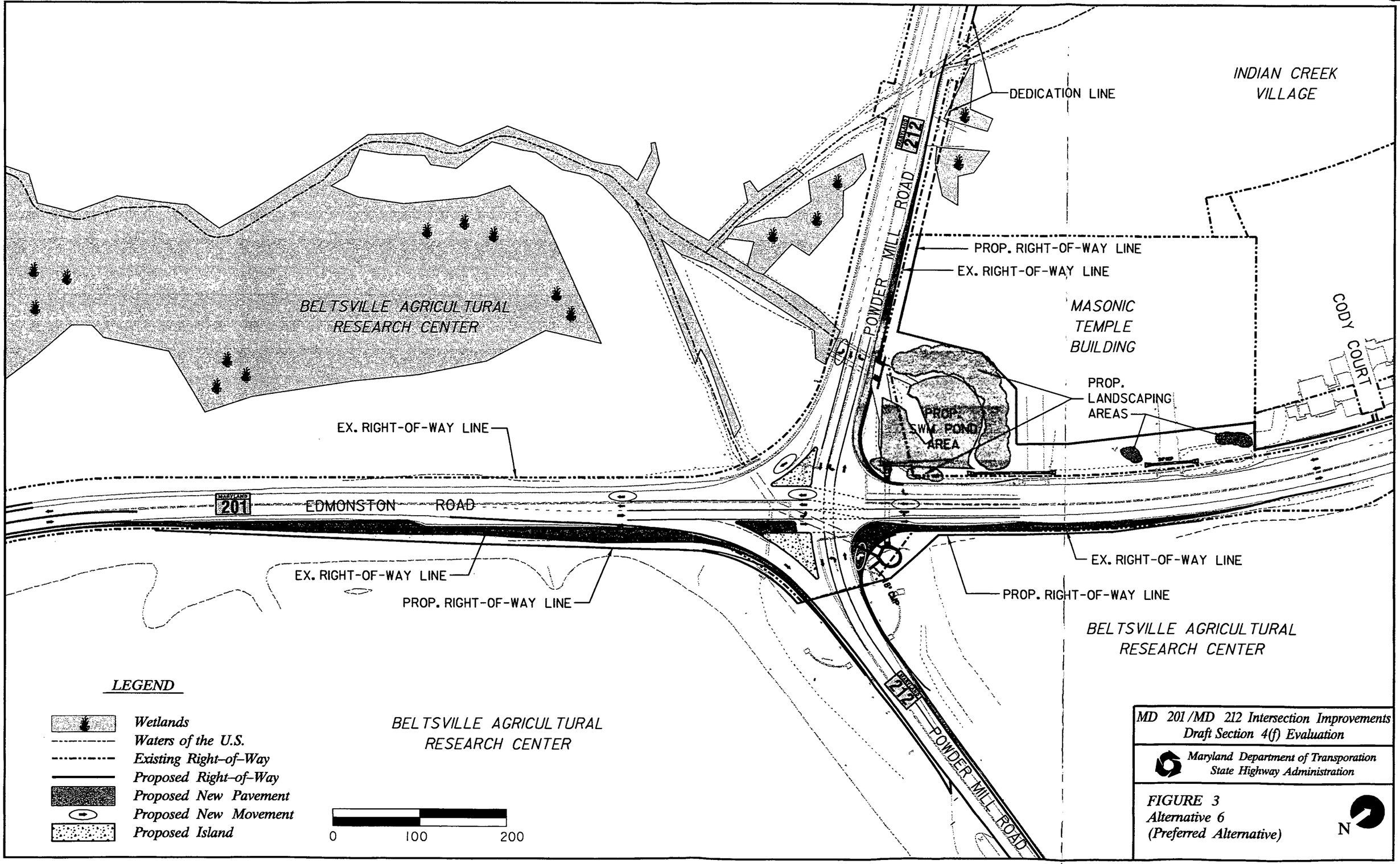
INDIAN CREEK VILLAGE
DEDICATION LINE
MARYLAND 212
POWDER MILL ROAD
PROP. RIGHT-OF-WAY LINE
EX. RIGHT-OF-WAY LINE
MASONIC TEMPLE BUILDING
CODY COURT
PROP. LANDSCAPING AREAS
PROP. SWM POND AREA
BELTSVILLE AGRICULTURAL RESEARCH CENTER
EX. RIGHT-OF-WAY LINE
MARYLAND 201
EDMONSTON ROAD
EX. RIGHT-OF-WAY LINE
PROP. RIGHT-OF-WAY LINE
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FIGURE 3
Alternative 6
(Preferred Alternative)
N

impact the historic cistern structure in the northeast intersection quadrant. The proposed intersection improvement maximizes safety while minimizing impacts to natural environmental features including forest, wetlands and contributing historic structures on the BARC property.

IV. DESCRIPTION OF SECTION 4(F) PROPERTY:

The following section describes the Section 4(f) resources within the intersection area that would require use or impact with implementation of the preferred alternative.

Beltsville Agricultural Research Center (BARC)

General Description:

The Beltsville Agricultural Research Center is a national center for agricultural experimentation and testing. The property falls within the southwest, southeast, and northeast quadrants of the intersection. BARC is the main research facility of the U.S. Department of Agriculture, and is the leading and most diversified agricultural research complex in the world. Government acquisition began in 1920, and grew rapidly with the Depression-era programs of the 1930s and 1940s. Included within the approximately 7,000-acre complex are areas for the Beltsville Human Nutrition Research Center, the Livestock and Poultry Science Institute, the Natural Institute and the Plant Sciences Institute. Building types include houses dating from circa 1880 to 1930, agricultural buildings such as barns and animal sheds dating from circa 1910 to the present, laboratory and research buildings dating from circa 1930 to 1950, and public-oriented buildings, such as visitors' centers and guard offices, dating from circa 1930 to 1940.

Four contributing buildings on the property fall within the APE of the project. In addition, a contributing element, a "Y" shaped drainage structure, is located beneath the intersection. Headwalls associated with this structure are located in the northeast, southeast and southwest quadrants. The structure contributes to the significance of the site as an agricultural experimentation and testing facility as part of the early drainage plan for the Linkage Farm, and as an architecturally consonant part of the overall complex. The northeast intersection quadrant consists of a cistern comprised of a classical horseshoe-shaped soil conservation drop structure with an arched masonry headwall. The headwall and drop structure resemble other significant masonry features on the BARC property, such as the stone entrance gates, in materials and craftsmanship.

Significance Summary:

The BARC property is eligible for listing on the National Register of Historic Places under Criterion A as an important site that reflects the development of a national center for agricultural experimentation and testing. The property is also eligible under Criterion C as a grouping of buildings which represents both the adaptation and reuse of traditional buildings and the new

technologies which were in use and building traditions which were developed in the mid-twentieth centuries. This facility is the world's major agricultural proving ground and study area.

V. IMPACTS ON SECTION 4(F) PROPERTY

Implementation of the preferred alternative (Alternative 6) would result in an adverse effect on the Beltsville Agricultural Research Center. The MD 201/MD 212 improvements would impact the BARC property through acquisition of right-of-way (ROW), roadway widening and reconfiguration of the historic drainage feature located beneath the roadway. SHA must remove a masonry drop structure in the northeast quadrant in order to improve drainage and prevent the hydraulic problems that frequently flood this busy intersection. The associated historic drainage structures in the southeast and southwest quadrants would not be impacted by the preferred alternative. A total of 0.29 acres of right-of-way would be required from the Beltsville Agricultural Research Center for roadway widening and relocating the drop structure. No contributing buildings would be impacted by the proposed widening.

VI. AVOIDANCE AND MINIMIZATION ALTERNATIVES

Based on the CRS recommendations, a total of six alternatives were considered to improve existing intersection congestion. In addition to the preferred alternative (Alternative 6), five alternatives were evaluated for Section 4(f) avoidance or minimization alternatives. These alternatives include:

- Alternative 1 – No-Build
- Alternative 2 – Change MD 201 SB Right Turn Lane to Right-Through Turn Lane and Add MD 212 EB Right
- Alternative 3 – Add MD 201 SB Through Lane
- Alternative 4 – Change MD 201 SB Right Lane to Right Through Lane
- Alternative 5 – Add MD 212 EB Right Turn Lane
- Alternative 6 – Add MD 201 SB Though Lane and MD 212 EB Right Turn Lane

This section describes avoidance and minimization alternatives and their impacts on Section 4(f) property. Detailed critical lane traffic analyses were performed to establish peak hour LOS for each alternative considered. The traffic count for this intersection was completed in March 1998 and reflects the design year LOS.

Based on the results of the critical lane traffic analysis, it was determined that only two alternatives would meet the project purpose and need of improving peak hour LOS to D or better (Alternatives 2 and 6) and four alternatives would not meet the purpose and need (Alternatives 1, 3, 4 and 5).

Table 1 presents a summary comparison of the six alternatives considered. The table highlights each alternatives' effectiveness in meeting the project purpose and need of improving LOS to D or better and in meeting the additional goals identified for this intersection (safety and flooding). The table also identifies impacts to Section 4(f) property and quantifies right-of-way requirements and wetland impacts.

Table 1
Summary of Alternatives

Alternative	Meets Project Purpose of Improving LOS to D or better	Meets Additional Goals Identified for the Project		Impacts on Section 4(f) Historic Property			Right-of-Way Required		Wetland Impacts
		Improve Safety (Flatten MD 212 Curvature)	Improve Drainage	Avoidance	Minimization		Total	BARC Property	
					Use	Impact			
							acres		acres
Alternative 1	N	N	N	✔			0.0	0.0	0.0
Alternative 2	Y	N	N		✔		0.98	0.23	0.03
Alternative 3	N	N	N				0.98	0.23	0.03
Alternative 4	N	N	N				0.98	0.23	0.03
Alternative 5	N	N	N				0.75	0.0	0.03
Alternative 6	Y	Y	Y	Preferred Alternative			1.03	0.29	0.03

Y = Yes N = No

Note: The same stormwater management pond right-of-way was assumed for all alternatives.

A. Avoidance Alternatives

1. Alternative 1 (No-Build):

Alternative 1 would not use Section 4(f) resources. Alternative 1 would not provide significant improvements to the MD 201/MD 212 intersection. Minor improvements would occur as part of normal roadway and structural maintenance. These improvements would not measurably affect roadway capacity or improve LOS.

Alternative 1 would not meet the purpose and need of the project of improving LOS to D or better. This alternative would also not address the other goals identified for the project including the safety concern regarding the substandard curvature on MD 212 and the drainage problems

that frequently cause the intersection to flood with up to one foot of water. The operational and safety deficiencies would be expected to worsen with time, due to continued development in the surrounding growth areas of Prince George's and Montgomery Counties, which will contribute to the traffic at this intersection. In summary, this alternative would not address the project's purpose and need or provide additional benefits of improving safety and/or flooding.

B. Minimization Alternatives

1. Alternative 2 (Change MD 201 SB Right Turn Lane to Right-Through Lane and Add MD 212 EB Right Turn Lane)

Alternative 2 includes changing the MD 201 southbound right turn lane to a right-through lane, adding a MD 201 southbound receiving through lane and adding a MD 212 dedicated eastbound right turn lane ***(Figure 4)***. This alternative would require widening MD 201 south of the intersection and widening MD 212 west of the intersection. Widening would occur on the east side of MD 201 to accommodate the additional receiving through lane and on the north side of MD 212 to allow for the eastbound right turn lane. Widening on these two sides would minimize impact to BARC property while avoiding any impact to contributing historic structures around the intersection. This alternative would, therefore, only require use of BARC property. Widening on the east side of MD 201 (south of the intersection) would not impact wetlands or woodlands. Widening on the north side of MD 212 would require impacting wetlands and WUS, however, widening to this side would have far less impact on wetlands and woodlands than would widening to the south side of MD 212.

Based on the critical lane analysis, Alternative 2 improvements would result in a LOS B in the AM peak and LOS C in the PM peak. The existing substandard curvature along MD 212 would not be corrected with this alternative. This alternative would also not address flooding problems at the intersection. Addressing the existing flooding problems would require modifying (impacting) the existing historic drainage structure to accommodate increased stormwater runoff. In order to correct the problem, it would require resizing the existing structure to accommodate additional runoff.

In summary, this alternative would meet the purpose and need of improving existing traffic conditions by improving LOS to D or better. This alternative would not, however, address the safety and flooding problems identified for this intersection. Drainage problems will likely worsen as more development creates increased stormwater runoff volumes and velocities.

C. Other Alternatives Considered But Do Not Meet the Project Purpose and Need

Alternatives 3, 4 and 5 were also considered as potential Section 4(f) avoidance and minimization alternatives. The detailed critical lane traffic analyses conducted for these alternatives determined, however, that an unacceptable LOS would result from each of these

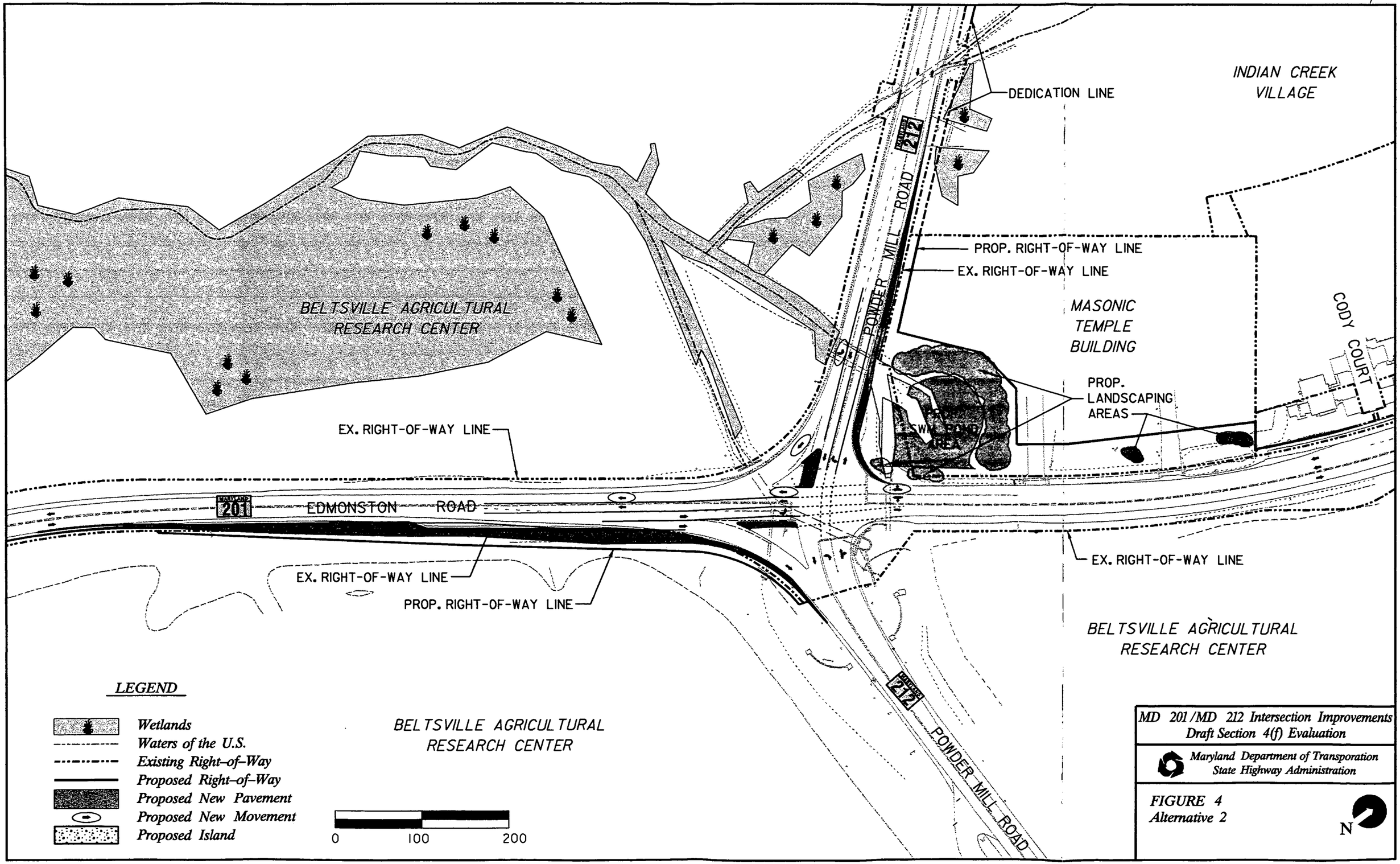
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FIGURE 4
Alternative 2
N

alternative improvements. As described below, these alternatives do not fully meet the project purpose and need of improving peak hour LOS to D or better.

1. Alternative 3 (Add MD 201 SB Through Lane)

Alternative 3 would involve adding a MD 201 southbound through lane ***(Figure 5)***. This alternative would require widening MD 201 north and south of the intersection. No widening to MD 212 would be required under this alternative. In order to minimize use of BARC property, widening would occur on the west side of MD 201 (north of the intersection) and on the east side of MD 201 (south of the intersection). Although widening on two different sides of MD 201 (north and south of the intersection) minimizes impact to BARC property and avoids impacting contributing historic structures, this alternative would pose traffic operation and safety issues by requiring lane shifts through the intersection. This alternative would impact wetlands in the northwest intersection quadrant.

Based on the critical lane analysis, Alternative 3 improvements would result in a LOS D in the AM peak and LOS E in the PM peak. Although LOS would be improved from existing conditions, the purpose and need would not be met by this alternative. The existing substandard curvature along MD 212 would also not be addressed with this alternative as no widening to MD 212 would occur with this alternative. This alternative would require lane shifts through the intersection, which may pose additional traffic operation and safety issues. The intersection drainage problems would also not be addressed by this alternative. In summary, this alternative would not meet the purpose and need of improving peak hour LOS to D or better.

2. Alternative 4 (Change MD 201 SB Right Turn Lane to Right Through Lane)

Alternative 4 improvements involve changing the MD 201 southbound right turn lane to a right-through lane and adding a MD 201 southbound receiving through lane ***(Figure 6)***. This alternative is similar to Alternative 2 for MD 201 improvements, however, this alternative does not propose improvements to MD 212. This alternative would require widening MD 201 south of the intersection only. Widening would occur on the east side of MD 201 to accommodate the additional receiving through lane. Widening east of MD 201 minimizes impact to BARC property, and does not impact any contributing historic structures around the intersection. Widening to the east also minimizes impacts to natural environmental features, including wetlands and woodlands. This alternative would only require use of BARC property.

Based on the critical lane analysis, Alternative 4 improvements would result in a LOS D in the AM peak and LOS E in the PM peak. This alternative, therefore, would not meet the purpose and need of the project. This alternative would also not address the safety and drainage issues. The existing substandard curvature along MD 212 would not be corrected with this alternative as no MD 212 widening is proposed as part of this alternative. In summary, this alternative would not meet the project purpose and need.

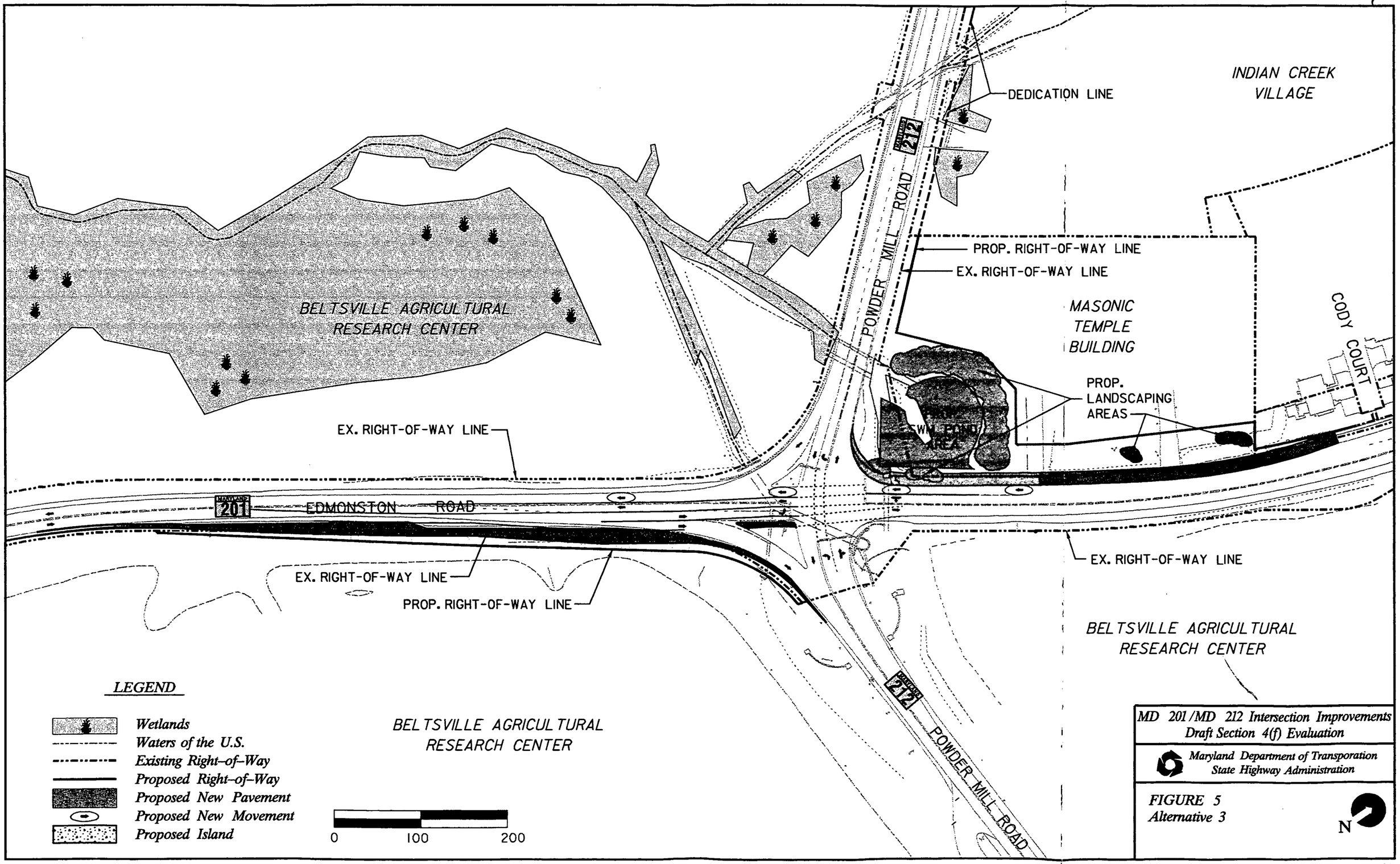
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FIGURE 5
Alternative 3
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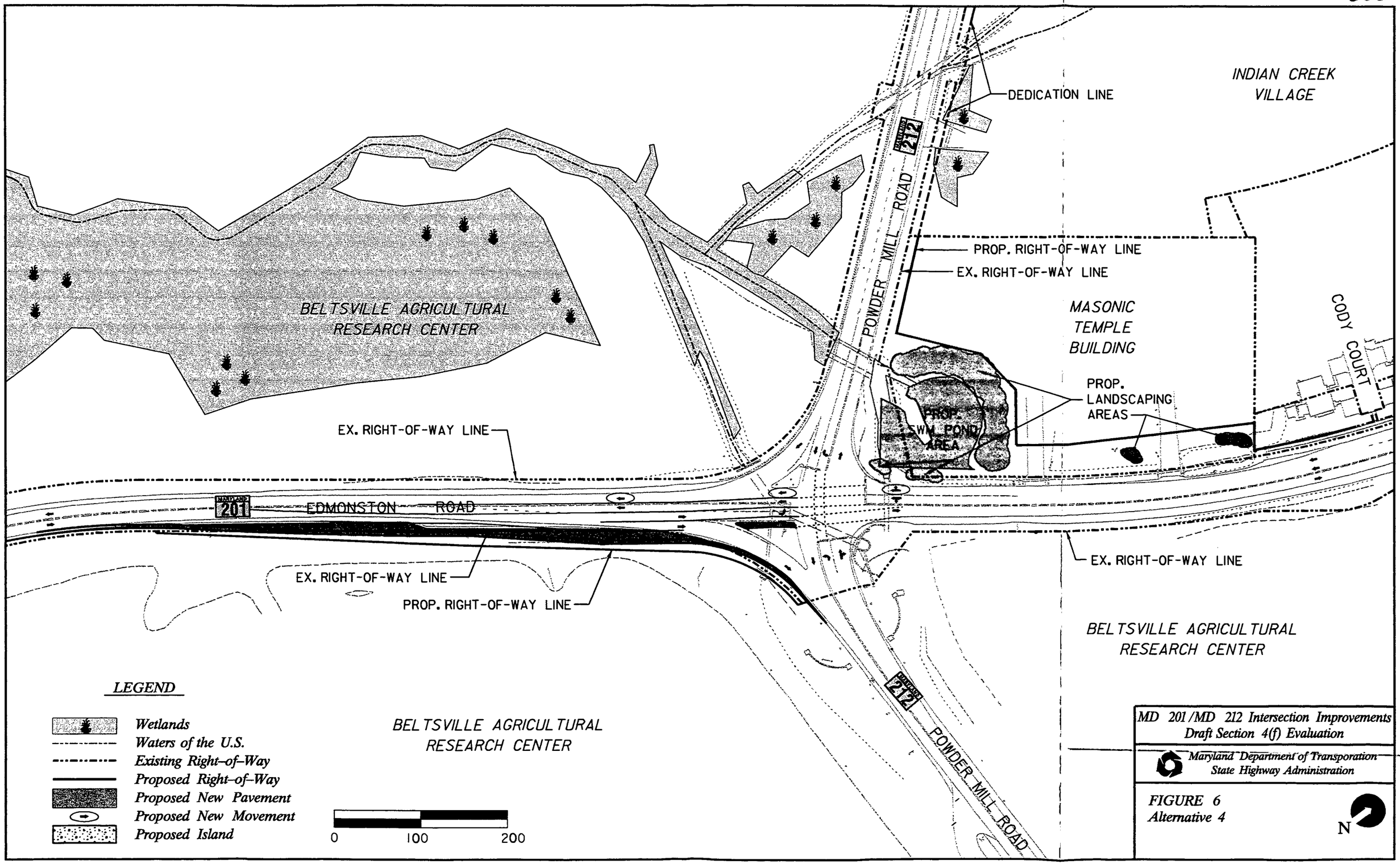
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FIGURE 6
Alternative 4
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3. Alternative 5 (Add MD 212 EB Right Turn Lane)

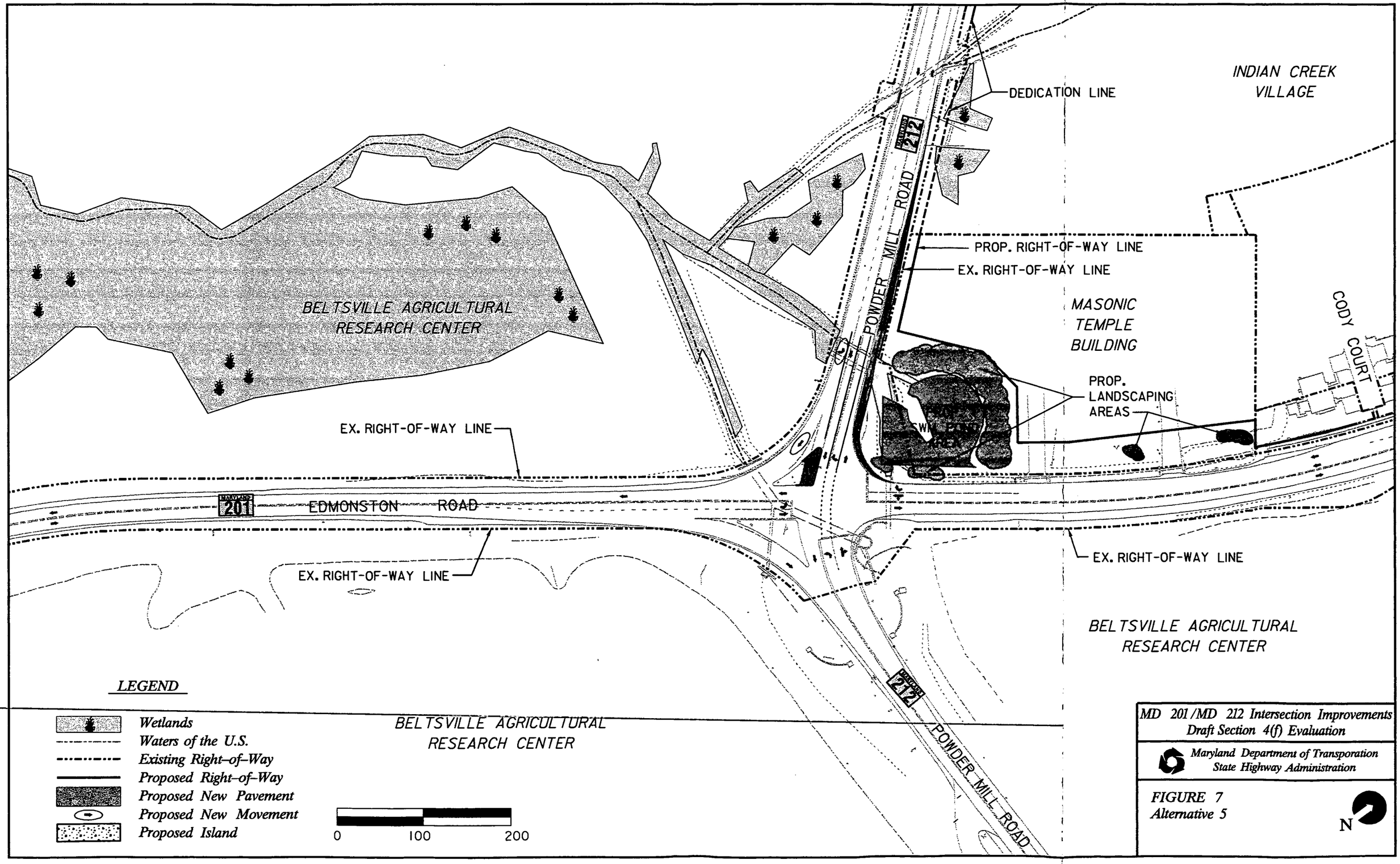
Alternative 5 includes adding a dedicated eastbound right turn lane from MD 212 to MD 201 ***(Figure 7)***. This alternative would require widening MD 212 west of the intersection. Widening would occur on the north side of MD 212 to allow for the eastbound right turn lane. Widening to the north avoids any impact to BARC property or contributing historic structures. This alternative would, therefore, not require use and would not impact any historic properties or contributing elements of the BARC property. This alternative would, however, have impacts to wetlands in the northwest quadrant. This alternative would also impact Waters of the United States (WUS), approximately 500 feet west of the intersection.

Based on the critical lane analysis, Alternative 5 improvements would result in a LOS D in the AM peak and LOS E in the PM peak. Although traffic conditions would improve over existing conditions, this alternative does not meet the purpose and need of improving peak hour LOS to D or better. Alternative 5 would not correct the existing substandard curvature along MD 212 therefore, the safety issue would not be addressed with this alternative. Correcting the substandard curvature would require adding more pavement in the northeast quadrant, which would then impact the historic cistern structure. This alternative would also not address the poor drainage problems at the intersection. Addressing the existing flooding problems would require modifying (impacting) the existing historic drainage structure to accommodate increased stormwater runoff, which would then result in impacts to the BARC property and the contributing drainage feature in the northeast quadrant.

VII. MEASURES TO MINIMIZE HARM

The following mitigation measures have been proposed to minimize harm of this project to the BARC property:

- The stormwater management facility originally located along the east leg of MD 212 has been relocated to the northwest quadrant.
- The shoulder width has been reduced from ten to four feet.
- Lane widths have been reduced from 12 feet to 11 feet.
- The westbound right turn movements provided as a 22-foot-wide paved separated turn lane (to avoid impacting water vaults/meters) has been eliminated.
- SHA will perform in-kind replacement mitigation by rebuilding the contributing cistern which must be relocated and enlarged in order to accommodate the increased stormwater runoff. SHA will use original design plans provided by BARC, modified to a large scale to handle increased water volumes. SHA will use stone from the original cistern and similar masonry techniques when constructing the new cistern.
- SHA will rehabilitate the drainage structure in the southwest quadrant. This structure has a deteriorating coping. The mortar has crumbled, and it is likely that without rehabilitation, the


INDIAN CREEK VILLAGE
DEDICATION LINE
MARYLAND 212
POWDER MILL ROAD
PROP. RIGHT-OF-WAY LINE
EX. RIGHT-OF-WAY LINE
MASONIC TEMPLE BUILDING
CODY COURT
PROP. LANDSCAPING AREAS
BELTSVILLE AGRICULTURAL RESEARCH CENTER
EX. RIGHT-OF-WAY LINE
MARYLAND 201
EDMONSTON ROAD
EX. RIGHT-OF-WAY LINE
EX. RIGHT-OF-WAY LINE
BELTSVILLE AGRICULTURAL RESEARCH CENTER
MARYLAND 212
POWDER MILL ROAD
BELTSVILLE AGRICULTURAL RESEARCH CENTER
LEGEND
Wetlands
Waters of the U.S.
Existing Right-of-Way
Proposed Right-of-Way
Proposed New Pavement
Proposed New Movement
Proposed Island
0
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MD 201/MD 212 Intersection Improvements
Draft Section 4(f) Evaluation
Maryland Department of Transporation
State Highway Administration
FIGURE 7
Alternative 5
N

granite coping stones will eventually fall off. Rehabilitation will involve in-kind replacement of the headwall and exterior two feet of box culvert by providing a drainage system behind the wall. In addition, cores holes will be formed through the walls of the box culvert just inside the headwall and one foot above the normal water surface elevation to drain water. Existing arch ring and capstones will be reused.

- The small historic inlet structure in the southeast quadrant has a void under the capstones for the full width of the structure, and the headwall has missing mortar and stones. The capstones lean toward the roadway, which has trapped water behind the headwall and deteriorated the concrete in the box culvert immediately behind the headwall. Mitigation will involve installation of a drainage system behind the headwall and core holes through the walls of the box culvert just inside the headwall and one foot above normal water surface elevation to drain water. The stone wall on the right side of the catch basin will be rebuilt using the existing stones. Also, missing stones and mortar in the headwall will be replaced, and capstones will be reset.
- SHA will modify the historic inventory form to include the in-kind replacement of the cistern drop structure.

We believe these mitigation measures will adequately mitigate any project impacts on the historic property.

VIII. COORDINATION

A *Memorandum of Agreement* for execution of specific actions and measures designed to constitute adequate and acceptable mitigation of adverse effects on the BARC property has been prepared ***(Appendix A)***. A final *Memorandum of Agreement* is currently being circulated to FHWA and the Advisory Council on Historic Preservation for signature. Highlights of the *Memorandum of Agreement* are as follows:

- All actions will be coordinated with the Advisory County on Historic Preservation, the Maryland Historic Trust, the Federal Highway Administration and the State Highway Administration.

- The design shall adhere to the Secretary of Interior's Standard's for Rehabilitation in designing and constructing the new northeast headwall and drop structure.

- SHA shall rehabilitate the southeast and southwest masonry headwalls of the affected drop structure to restore the integrity of these elements.

This project has been coordinated with the Maryland Historical Trust since December 1998. In correspondence dated January 29, 1999, the Maryland Historical Trust concurred that the

preferred alternative would constitute an adverse effect on the Beltsville Agricultural Research Center.

This project has been coordinated with the Deputy Area Director of BARC beginning in June, 1998. This is when SHA initially coordinated with the Deputy Area Director to present the preliminary design concepts at the MD 201/MD 212 intersection. The BARC director was supportive of the improvements and expressed BARC's willingness to work with the SHA and the MHT in constructing intersection improvements. The concept originally presented was similar to the preferred alternative.

Government agencies that will provide review and/or approval of the final plans include:

- U.S. Army Corps of Engineers
- Maryland Department of the Environment – Nontidal Wetlands and Waterways Division
- Maryland Department of the Environment – Water Management Division and Administration
- Beltsville Agricultural Research Center
- Maryland Historic Trust
- Maryland State Highway Administration, Highway Design Division

APPENDIX A

Agency Correspondence

From: Pamela Stephenson
To: hubsmtp:"mnaber@achp.gov"
Date: 2/16/99 11:55am
Subject: Early notification MD 201 at MD 212

Hello, MaryAnn
This e-mail serves as an early notification of an adverse effect for the proposed MD 201 at MD 212 intersection improvement project. The proposed improvements consist of highway widening for a through lane on MD 201 and turn lanes on MD 212.
There are two historic properties eligible for the National Register in the APE: (1) Bridge #16038, MD 212 over Indian Creek, and (2) the Beltsville Agricultural Research Center (BARC), which is considered to be an historic district and includes numerous contributing structures and landscape features. MD 201 and MD 212 are within the BARC eligible historic boundaries. The proposed widening of the intersection would take land and require relocating a contributing cistern structure within BARC.

We are working with SHA and the MD SHPO to avoid or mitigate potential adverse effects and have discussed possible mitigation measures in the development of a MOA. The US Dept. of Agriculture, BARC property owner, is also participating in the consultation of effects.

Please let me know if the Council wishes to be a consulting party or if a 2-party MOA is sufficient. Please feel free to give me a call at 410-962-4342 ext 145, if you have any questions.

Thanks,
Pam

CC: MDSHAHQ.SHADGN:JDowling,MDSHAHQ.SHADGN:CGural,MDSH...

MEMORANDUM OF AGREEMENT
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION,
AND THE
MARYLAND STATE HISTORIC PRESERVATION OFFICER
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 CFR 800.5(e)(4)
REGARDING INTERSECTION IMPROVEMENTS AT MD 201 AND MD 212
PRINCE GEORGE'S COUNTY, MD

WHEREAS, the Federal Highway Administration (FHWA) proposes to acquire right of way, reconfigure traffic lanes, and reconstruct drainage facilities in order to improve the MD 201 and MD 212 intersection in Prince George's County, Maryland;

WHEREAS, the FHWA has determined that the acquisition of right of way from the Beltsville Agricultural Research Center (BARC), a historic district eligible for inclusion in the National Register of Historic Places, and the demolition of a masonry headwall and drainage structure will have an adverse effect on the BARC property; and

WHEREAS, the FHWA has consulted with the Maryland State Historic Preservation Officer (MD SHPO) in accordance with Section 106 of the National Historic Preservation Act (16 U.S.C. 470), and its implementing regulations (36 CFR Part 800) to resolve the adverse effect of intersection improvements at MD 201 and MD 212 on historic properties; and

WHEREAS, the Maryland State Highway Administration (SHA) participated in the consultation and has been invited to concur in this Agreement;

WHEREAS, the FHWA and the MD SHPO have identified the United States Department of Agriculture, owner of the Beltsville Agricultural Research Center (USDA-BARC), as an interested party and invited them to participate in the consultation and to concur in this Agreement;

NOW, THEREFORE, the FHWA and the MD SHPO agree that, upon acceptance of this Agreement by the Advisory Council on Historic Preservation (Council), the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The Federal Highway Administration shall ensure that the following stipulations are implemented:

I. Documentation

A. In consultation with the MD SHPO, SHA shall prepare a report in order to document the concrete rigid frame drainage structure and associated weirs sufficient to fully describe the current appearance and historical use of the features prior to demolition and reconstruction. Emphasis will be placed on describing these drainage features as contributing resources within the National Register-eligible Beltsville Agricultural Research Center Historic District, and describing the surrounding landscape.

II. Design

A. SHA shall adhere to the *Secretary of the Interior's Standard's for Rehabilitation* in designing and constructing the new northeast headwall and drop structure. Specifically, new work will be compatible with the massing, size, scale, and architectural features of the historic property and its environment. Plans shall be submitted to MD SHPO and USDA-BARC for review, comment, and approval at 30%, and approval only at the 90% final stage.

III. Rehabilitation

A. SHA shall rehabilitate the southeast and southwest masonry headwalls of the affected drop structure to restore the integrity of these elements. SHA shall employ a historic preservation consultant and develop rehabilitation plans in consultation with the MD SHPO and USDA-BARC, using the *Secretary of the Interior's Standards*.

IV. Administration

A. Professional Guidelines: SHA shall ensure that all design, modification, and documentation carried out pursuant to this Agreement is performed by or under the direct supervision of a person or persons meeting at a minimum qualifications for an Architectural Historian set forth in the Secretary of the Interior's Professional Quality Standards (36 CFR Part 61 Appendix A).

B. Amendment: Any party to this Memorandum of Agreement may request that it be amended, whereupon the parties will consult in accordance with 36 CFR Part 800.5 (e) to consider the amendment.

C. Dispute Resolution: Should any signatory party object within sixty (60) days to implementation of any action proposed pursuant to this agreement, the FHWA shall consult with the objecting party to resolve the objection. If the FHWA determines that the objection cannot be resolved, the FHWA shall forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation. Within fifteen (15) days after receipt of all pertinent documentation, the Council will provide the FHWA with either:

1. recommendations that the FHWA will take into account in reaching a final decision regarding the dispute; or
2. notification to the FHWA that it will comment pursuant to 36 CFR Part 800.6 (b) and proceed to comment.

Any Council recommendation or comment provided in response to such a request will be taken into account by the FHWA in accordance with 36 CFR Part 800.6 (c) (2) with reference only to the subject of the dispute; the FHWA responsibility to carry out all actions under this agreement that are not the subjects of the dispute will remain unchanged.

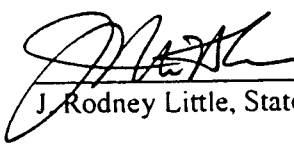
Execution of this Memorandum of Agreement by the USDA-BARC, the FHWA, the MD SHPO, and the SHA, its subsequent acceptance by the Advisory Council on Historic Preservation, and implementation of its terms evidence that the FHWA has afforded the Council an opportunity to comment on the improvements to the MD 201 and MD 212 intersection in Prince George's County, Maryland and the effects on historic properties, and that the FHWA has taken into account the effects of the undertaking on historic properties.

Federal Highway Administration

_____ _____

Nelson J. Castellanos, Division Administrator (date)

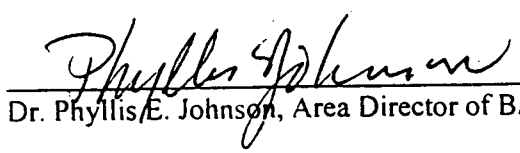
Maryland Historical Trust



J. Rodney Little, State Historic Preservation Officer 5-5-99 (date)

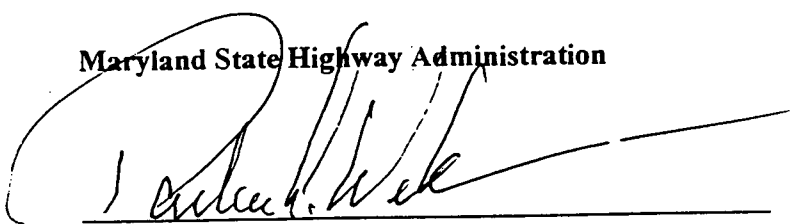
CONCUR:

United States Department of Agriculture, A.R.S., B.A.R.C



Dr. Phyllis E. Johnson, Area Director of BARC 5-21-99 (date)

Maryland State Highway Administration



Parker F. Williams, Administrator 6/6/99 (date)

Accepted for the Advisory Council on Historic Preservation

_____ _____

John M. Fowler, Executive Director (date)

Maryland Department of Transportation
State Highway Administration

Parris N. Glendening
Governor
John D. Porcari
Secretary
Parker F. Williams
Administrator

February 12, 1999

RE: Project No. PG275A21
MD 201 @ MD 212
Intersection Improvement
Prince George's County, Maryland

Mr. Nelson J. Castellanos,
Division Administrator
Federal Highway Administration
P.O. Box 1715
Baltimore MD 21201

Attention: Ms. Pamela Stephenson

Dear Mr. Castellanos:

In accordance with 36 CFR 800.5, the Maryland State Highway Administration (SHA), requests that you inform the Advisory Council on Historic Preservation that the proposed intersection improvements at MD 201 at MD 212 has been issued an adverse determination, and requests any comments and seeks its concurrence with the adverse effect determination for the project. Additionally, SHA requests that you ask the Advisory Council for its participation as a consulting party to the Memorandum of Agreement (MOA) that will be prepared by SHA in conjunction with the Maryland Historical Trust (MHT).

MHT has indicated that the Beltsville Agricultural Research Center is considered an historic district including its landscape features and is eligible for inclusion in the National Register of Historic Places, and that the work which SHA proposes, improving the intersection by widening MD 201 and MD 212, will cause adverse impacts to this historic resource. Thus, SHA, in conjunction with MHT, is in the process of developing a MOA for the project.

Copies of the letter from MHT describing the significance of the property and its contributing elements and supporting the eligibility of the property for listing in the National Register, as well as the basis for the effect determination, is attached for transmittal to the Council. Your letter to the Council would also serve as notice that you agree with the effect determination.

My telephone number is (888) 204-4828

Maryland Relay Service for Impaired Hearing or Speech
1-800-735-2258 Statewide Toll Free

Mailing Address: P.O. Box 717 • Baltimore, MD 21203-0717
Street Address: 707 North Calvert Street • Baltimore, Maryland 21202

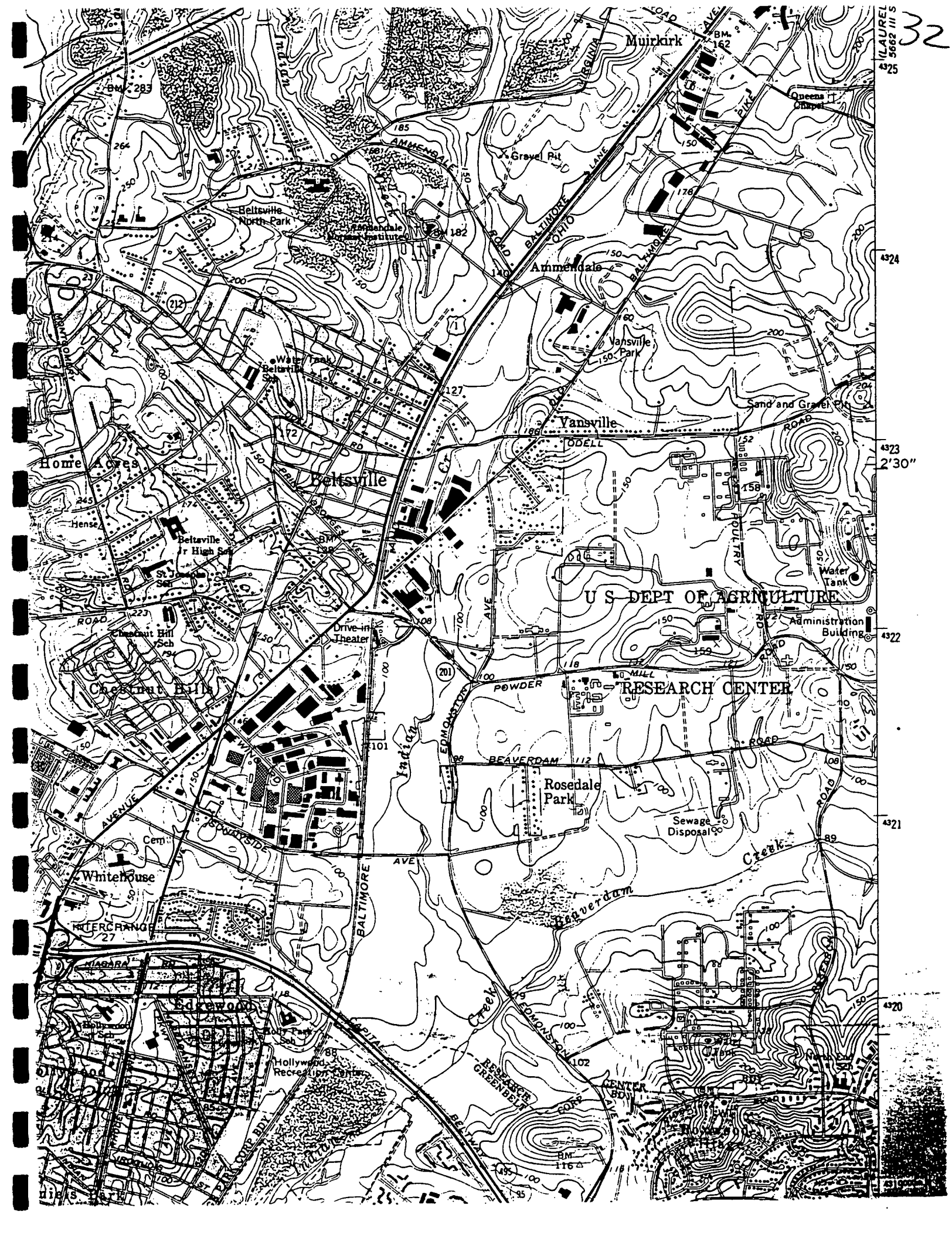
Once coordination with the MHT is complete, we will submit the documentation specified in 36 CFR 800.8 (b) and the MOA as required in 36 CFR 800.8 (c) for your review and subsequent transmittal to the Council. Please let us know if the Council has any comments in the interim.

Sincerely,

Parker F. Williams
Administrator

by: Louis H. Ege, Jr.
Neil J. Pedersen, Director
Office of Planning and
Preliminary Engineering

Attachment
cc: Mr. John Denniston SHA-EPD
Ms. Jill Dowling, SHA-PPD
Mr. Louis H. Ege, Jr., SHA-PPD
Mr. Bruce Grey, SHA-PPD
Ms. Caryn Gural, SHA-PPD
Mr. J. Rodney Little, MHT


Muirkirk
Queens Chapel
Gravel Pit
Ammendale
Beltsville North Park
Ammendale Normal Institute
Vansville
Vansville Park
Sand and Gravel Pit
Water Tank
Beltsville
Home Acres
Beltsville Jr High Sch
St Joseph Sch
Chestnut Hill Sch
Chestnut Hills
Drive-in Theater
U S DEPT OF AGRICULTURE
Administration Building
RESEARCH CENTER
Rosedale Park
Sewage Disposal
Whitehouse
Edgewood
Holly Park Sch
Hollywood Recreation Center
Indian Creek
Beaverdam Creek
BALTIMORE AVE
BALTIMORE OHIO ROAD
EDMONSTON ROAD
POWDER MILL ROAD
BEAVERDAM ROAD
ODELL ROAD
POULTRY ROAD
AMMENDALE ROAD
GREENBELT
CAPITAL BELTWAY
INTERCHANGE 27
BM 283
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BM 182
BM 138
BM 116
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Maryland Department of Housing and Community Development

Division of Historical and Cultural Programs

100 Community Place
Crownsville, Maryland 21032

410-514-7600
1-800-756-0119
Fax: 410-987-4071
Maryland Relay for the Deaf:
1-800-735-2258

http://www.dhcd.state.md.us

Parris N. Glendening
Governor

Raymond A. Skinner
Secretary

Marge Wolf
Deputy Secretary

January 29, 1999

Ms. Cynthia D. Simpson
Deputy Division Chief
Project Planning Division
Maryland State Highway Administration
P.O. Box 717
Baltimore, MD 21203-0717

RE: Project No. PG275A21
MD 201 at MD 212, Prince George's County, Maryland

Dear ~~Ms. Simpson~~ Cynthia:

Thank you for your letter of December 29, 1998 which we received on January 5, 1999 regarding the intersection improvements for MD 201 at MD 212. As we understand, SHA proposes to widen both roads in order to install a through lane on MD 201 (Edmonston Road) and right turn lanes from both east- and west-bound MD 212 (Powder Mill Road) to MD 201. These roads are within the boundary of the National Register eligible Beltsville Agricultural Research Center (BARC), which because of its size is considered an historic district including its landscape features.

DETERMINATION OF ELIGIBILITY

The Trust determined BARC to be National Register-eligible, first in 1991 and as recently as October 1998. No alterations have occurred to the historic property which would cause us to reverse that opinion. However, SHA's proposed improvements have the potential to impact the historic district, its contributing elements, as well as some individual resources. SHA through its consultant, P.A.C. Spero and Company, surveyed eight historic properties within the area of potential effect (APE). Attachment 1, the Trust's Determination of Eligibility Table, shows our determinations. We concur with SHA that the following properties are **eligible:**

BARC's Central Farm, Buildings 156, 157, 186 and 188;
BARC's stone cistern in the northeast quadrant of the MD 201-MD 212 intersection;
BARC's Linkage Farm, and Buildings 85, 85A and 85B; and
Bridge #16038, MD 212 over Indian Creek.

However, the remaining properties are not eligible for inclusion in the National Register, as noted in Attachment 1.

The Trust concurs with SHA's assessment that there are no archeological resources within the area of direct impact, and further archeological studies are not warranted.

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DETERMINATION OF EFFECT

The Maryland Historical Trust also concurs with SHA's determination that the road widening intersection improvements will have an *adverse effect* on the Beltsville Agricultural Research Center, an historic property eligible for the National Register. SHA proposes to mitigate the effect by rebuilding the contributing cistern which must be moved and enlarged in order to accommodate the increased stormwater runoff. We agree that this is an appropriate mitigation measure. Since the project is federally funded, a memorandum of agreement will be required. Once SHA has drafted the MOA, we believe a meeting to discuss the agreement should include representatives from the Trust and BARC. We would like to propose several other possible mitigation measures, which we will be prepared to discuss at that time.

Because this is a finding of adverse effect, the Federal Highway Administration will need to request comments from the Advisory Council on Historic Preservation. They may do so by writing to the Council at:

Mr. Don Klima
Advisory Council on Historic Preservation
Old Post Office Building,
1100 Pennsylvania Avenue, N.W., Suite 803
Washington, D.C. 20004.

In order to obtain the Council's views, please forward a copy of this letter in addition to the documentation listed in 36 CFR Part 800.8(a).

Thank you for providing us this opportunity to comment. Should you have any questions regarding our review, please contact Ms. Anne Bruder (for structures) at 410-514-7636, or Ms. Beth Cole (for archeology) at 410-514-7631.

Sincerely,

Rodney

J. Rodney Little
Director/State Historic Preservation Officer

JRL:AEB
9900011
Attachment
cc: Mr. Bruce Grey, SHA
Dr. Charles M. Hall, SHA
Ms. Jill Dowling, SHA
Ms. Pam Stephenson, FHWA
Ms. Sandra Downie, BARC

ATTACHMENT 1:
MHT'S DETERMINATION OF ELIGIBILITY TABLE
FOR MD 201 at MD 212 INTERSECTION IMPROVEMENTS

MIHP NUMBER	NAME	SHA DETERMINATION	MHT DETERMINATION	COMMENTS
PG: 61-27	Bridge 16036 over Indian Creek	Eligible	Concur -- eligible	
PG: 62-14	BARC: Central Farm, Buildings 156, 157, 186 and 188; the stone cistern in northeast quadrant of the MD 201 at MD 212 intersection; Linkage Farm, and Buildings 85, 85A and 85B	Eligible	Concur -- eligible	
PG: 62-34	Culvert, Powder Mill Road over Branch of Indian Creek	Not eligible	Concur -- not eligible	
PG: 67-31	Charles Rolls House	Not eligible	Concur -- not eligible	
PG: 67-32	Franklin and Catherine Morgan House	Not eligible	Concur -- not eligible	

United States Department of Agriculture
Agricultural Research Service
Beltsville Area Beltsville Agricultural Research Center
Beltsville, Maryland 20705

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JUL 02'98 PM 2:19 OPI

June 29, 1998

Mr. Robert Ritter, Project Manager
Project Planning Division
Maryland Department of Transportation
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Ritter:

Reference is made to the June 23, 1998, meeting and the discussion we had on the failure of the intersection of Powder Mill Road and Edmonston Road. The Beltsville Agricultural Research Center is very concerned about employee safety. Our employees who travel south on Edmonston and turn east to Powder Mill Road have had accidents while trying to make this left hand turn. We support the widening of this intersection so that it will be safer for all concerned.

We have reviewed our research area along Edmonston Road and determined that there is a sufficient buffer for the widening of the intersection (Powder Mill Road and Edmonston Road.) In addition, since Edmonston Road is being widened from Cherry Lane to Sunnyside Avenue by the U.S. Department of Agriculture, we feel that the your office may want to consider extending the work at the above referenced intersection to Sunnyside Avenue.

We appreciate the opportunity to discuss this issue with you and look forward to working with you in the future.

Sincerely,

John N. Van de Vaarst
Deputy Area Director
Facilities Management and Operation Division