

## PROGRAM DESCRIPTION AND OBJECTIVES

Bridges are an integral part of the County's transportation infrastructure. Bridge projects are undertaken to address public safety issues and may also increase capacity of existing County roadway infrastructure.

The Department of Transportation (DOT) evaluates bridge rehabilitation and reconstruction needs in the context of maintaining safety while preserving the character of existing County roadways. Bridge reconstruction and rehabilitation requirements vary from year to year as assessments of bridge conditions change. The biennial bridge inspection program, which DOT undertakes using the County's Federal aid allocation, identifies bridges for repair, rehabilitation, or reconstruction. Actual construction work is undertaken through a combination of contract services and County work crews. Qualifying bridges receive Federal aid for construction.

# HIGHLIGHTS

- Provide funding for 3 new projects: <u>Beach Drive Bridge</u>, <u>Brighton Dam Road Bridge No. M-0229</u>, and <u>Dorsey Mill Road Bridge</u>.
- Maintain funding for previously approved Dennis Avenue Bridge M-0194 Replacement, Bridge Preservation Program, Bridge Design, and Bridge Renovation.
- Increase funding for Gold Mine Road Bridge project to account for additional maintenance of stream requirements.

## PROGRAM CONTACTS

Contact Sogand Seirafi of the Department of Transportation at 240.777.7260 or Alison Dollar of the Office of Management and Budget at 240.777.2769 for more information regarding this department's capital budget.

# CAPITAL PROGRAM REVIEW

The Recommended FY19-24 CIP includes three new and five ongoing projects totaling \$37.0 million. This represents a \$2.2 million or 6.0 percent increase from the \$34.9 million included in the FY17-22 amended program. This increase is due primarily to the addition of three new projects. Federal aid allocation of up to 80 percent of the project construction cost will continue to be assumed for qualifying bridge projects.



Category SubCategory Transportation

Date Last Modified Bridges

01/04/18

Planning Area

Kensington-Wheaton

**Administering Agency** Status

Transportation

Preliminary Design Stage

#### EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	375	-	-	375	-	190	185	-	-	-	-
Land	5	-	-	5	-	5	-	-	-	-	-
Construction	3,822	-	-	3,822	-	1,597	2,225	-	-	-	-
TOTAL EXPENDITURES	4,202	-	-	4,202	-	1,792	2,410	-	-	-	-

#### FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Federal Aid	2,790	-	-	2,790	-	906	1,884	-	-	-	-
G.O. Bonds	1,412	-	-	1,412	-	886	526	-	-	-	-
TOTAL FUNDING SOURCES	4,202	-	-	4,202	-	1,792	2,410	-	-	-	-

#### APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	-	Year First Appropriation	
Appropriation FY 20 Request	4,202	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		



# **Project Description**

This project provides for the replacement of the existing Beach Drive Bridge over Silver Creek. The existing bridge, built in 1964, consists of three steel plate arches. The bridge provides a 24'-0" wide clear roadway with a 7'-0" Rock Creek Trail on the north side and has two 1'-9" parapets. The proposed replacement bridge includes a single span prestressed concrete slab beam structure carrying a 22'-0" roadway and a 5'-4" shoulder on each side. This width will allow for the implementation of safe on-road bicycling in accordance with the Master Plan. The Rock Creek Trail will be relocated to cross Silver Creek approximately 90 feet north of the proposed Beach Drive Bridge. This will improve safety by separating the pedestrian and light-use bicycle traffic from the vehicular traffic. The project includes approach roadway work at each end of the bridge as necessary to tie in to the existing roadway. The bridge and road will be closed to traffic during construction. In order to maintain pedestrian traffic on Rock Creek Trail during construction, the pedestrian bridge, and its approaches will be constructed prior to the removal of the existing Beach Drive Bridge. Accelerated bridge construction techniques will be utilized to minimize the disruption to the traveling public and local community.

15-2 **Bridges** 

#### Location

The project site is located approximately 100 feet east of the intersection of Beach Drive and Kensington Parkway within Rock Creek Park in Kensington, Maryland.

# Capacity

The roadway Average Daily Traffic (ADT) is approximately 5,500 and the roadway capacity will not change as a result of this project.

## Estimated Schedule

The design of the project is expected to finish in the winter of 2018. Construction is scheduled to start in spring 2020 and be completed in fall of 2020. Bridge will be closed to traffic from June 2020 to August 2020. This is a summer only construction project.

# Project Justification

The proposed replacement work is necessary to provide a safe roadway condition for the travelling public. The 2015 bridge inspection revealed that the steel arches are in poor condition. There is laminar corrosion on the arches above and below the waterline up to 3'-0" high above the footing. Arch 1 and Arch 3 have holes in the steel along the west side. Arch 2 has heavy corrosion with moderate to severe section loss at the waterline and at isolated locations on the arch walls. The holes in the arches can be probed up to 6" deep. The south parapet has been removed above Arches 2 and 3, as well as along the Southeast Wingwall. Temporary concrete traffic barrier sections have been placed along the south side of the bridge. The north spandrel wall has isolated areas of minor deterioration of the mortar joints. There is moderate efflorescence and corrosion staining between the north spandrel wall and the arches. The south spandrel wall is separated up to 3 inches from the edge of Arch 1. There is a concrete fascia repair from Arch 2 to the east side of Arch 3. Implementation of this project would allow the bridge to be restored to full capacity. The 1989 Kensington-Wheaton Master Plan designates Beach Drive as Park Road. The 2005 Countywide Bikeways Functional Master Plan calls for signed shared roadway (SR-16)

# Other

Project design costs are covered in the "Bridge Design" project (No. 509132).

# Fiscal Note

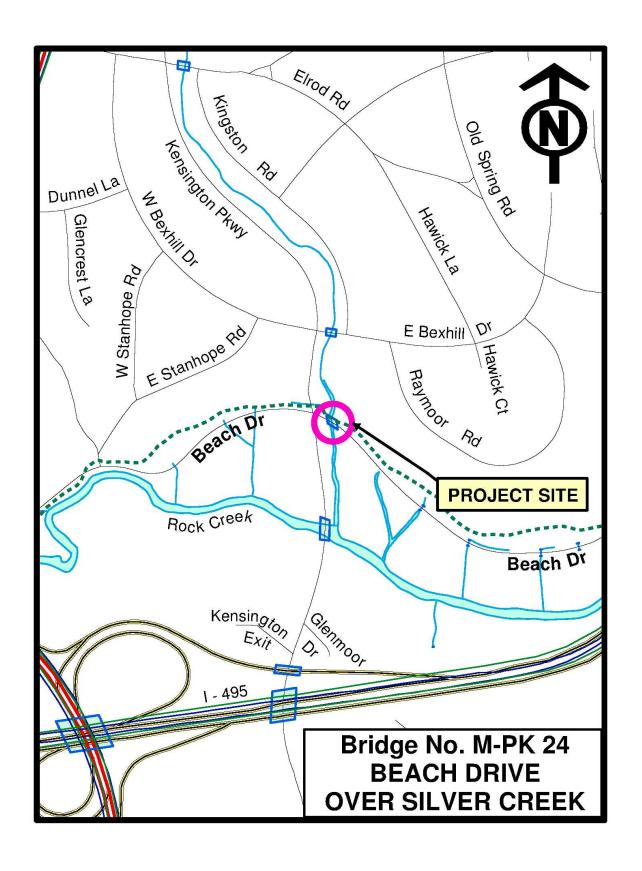
The costs of bridge construction and construction management for this project are eligible for up to 80 percent Federal Aid.

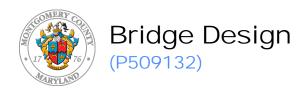
# Disclosures

A pedestrian impact analysis has been completed for this project.

# Coordination

Federal Highway Administration - Federal Aid Bridge Replacement/Rehabilitation Program, Maryland State Highway Administration, Maryland Department of the Environment, Maryland National Capital Park and Planning Commission, Montgomery County Department of Permitting Services, Utilities, Bridge Design Project CIP (No. 509132).





CategoryTransportationDate Last Modified01/06/18SubCategoryBridgesAdministering AgencyTransportationPlanning AreaCountywideStatusOngoing

#### EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	21,456	14,322	1,503	5,631	1,217	1,123	1,014	921	730	626	-
Land	442	442	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	91	91	-	-	-	-	-	-	-	-	-
Construction	97	97	-	-	-	-	-	-	-	-	-
Other	18	18	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	22,104	14,970	1,503	5,631	1,217	1,123	1,014	921	730	626	-

#### FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Federal Aid	956	956	-	-	-	-	-	-	-	-	-
G.O. Bonds	19,362	12,565	1,166	5,631	1,217	1,123	1,014	921	730	626	-
Land Sale	15	15	-	-	-	-	-	-	-	-	-
PAYGO	340	340	-	-	-	-	-	-	-	-	-
State Aid	1,431	1,094	337	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	22,104	14,970	1,503	5,631	1,217	1,123	1,014	921	730	626	-

#### APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	267	Year First Appropriation	FY91
Appropriation FY 20 Request	866	Last FY's Cost Estimate	18,875
Cumulative Appropriation	18,992		
Expenditure / Encumbrances	16,407		
Unencumbered Balance	2,585		

# **Project Description**

This ongoing project provides studies for bridge projects under consideration for inclusion in the CIP. Bridge Design serves as a transition stage for a project between identification of need and its inclusion as a stand-alone construction project in the CIP. Prior to the establishment of a stand-alone project, the Department of Transportation will complete a design which outlines the general and specific features required on the project. Selected projects range in type, but typically consist of upgrading deficient bridges so that they can safely carry all legal loads which must be accommodated while providing a minimum of two travel lanes. Candidate projects currently included are listed below (Other).

# Cost Change

Cost increase due to the addition of Montevideo Road Bridge #30, Zion Road Bridge #21, and the addition of FY23 and FY24 to this ongoing level of effort.

# Project Justification

There is continuing need for the development of accurate cost estimates and an exploration of alternatives for proposed projects. Bridge design costs for all projects which ultimately become stand-alone PDFs are included here. These costs will not be reflected in the resulting individual project. Future individual CIP projects, which result from bridge design, will each benefit from reduced planning and design costs. Biennial inspections performed since 1987 have consistently shown that the bridges currently included in the project for design studies are in need of major rehabilitation or replacement.

## Other

Candidates for this program are identified through the County Biennial Bridge Inspection Program as being deficient, load restricted, or geometrically substandard. The Planning, Design, and Supervision (PD&S) costs for all bridge designs include all costs up to contract preparation. At that point, future costs and Federal aid will be included in stand-alone projects. Candidate Projects: Park Valley Road Bridge #MPK-03, Gold Mine Road Bridge #M-0096, Brink Road Bridge #M-0064, Garrett Park Road Bridge #M-0352, Beach Drive Bridge #MPK-24, Glen Road Bridge #M-0148, Glen Road Bridge #M-0015, and Mouth of Monocacy Bridge #M-0043, Montevideo Road Bridge #M-0030, and Zion Road Bridge #M-0121.

## Fiscal Note

In FY18, \$2M in GO Bond appropriation transferred from the Silver Spring Transit Center project.

# Disclosures

A pedestrian impact analysis has been completed for this project. Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

# Coordination

Federal Highway Administration - Federal Aid Bridge Replacement/Rehabilitation Program, Maryland State Highway Administration, Maryland Department of the Environment, Maryland National Capital Park and Planning Commission, Montgomery County Department of Permitting Services, Utilities, Bridge Design Project CIP (No. 509132).



# Bridge Preservation Program

(P500313)

CategoryTransportationDate Last Modified01/04/18SubCategoryBridgesAdministering AgencyTransportationPlanning AreaCountywideStatusOngoing

#### EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	3,126	1,872	396	858	143	143	143	143	143	143	-
Land	29	15	2	12	2	2	2	2	2	2	-
Site Improvements and Utilities	2	2	-	-	-	-	-	-	-	-	-
Construction	8,704	4,690	1,800	2,214	369	369	369	369	369	369	-
Other	2	2	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	11,863	6,581	2,198	3,084	514	514	514	514	514	514	-

#### FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Federal Aid	366	366	-	-	-	-	-	-	-	-	-
G.O. Bonds	11,457	6,215	2,158	3,084	514	514	514	514	514	514	-
Intergovernmental	40	-	40	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	11,863	6,581	2,198	3,084	514	514	514	514	514	514	-

#### APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	1,028	Year First Appropriation	FY03
Appropriation FY 20 Request	-	Last FY's Cost Estimate	10,835
Cumulative Appropriation	8,779		
Expenditure / Encumbrances	7,144		
Unencumbered Balance	1,635		

# **Project Description**

This project includes actions or strategies that prevent, delay,or reduce deterioration of bridge elements, restore the function of existing bridges, keep bridges in good condition, and extend their useful life. Preservation actions may be preventive or condition driven. This project provides for removal of corrosion and installation of protective coatings on existing County steel bridges that have been identified as needing surface recoating through the Biennial Bridge Inspection Program. In addition, this project provides for the repair or replacement of leaking deck joints to minimize the deterioration and corrosion of bridge superstructure and substructure elements beneath the joints as identified through the Biennial Bridge Inspection Program. Bridge preservation field operations include the removal of the existing coating system which may contain hazardous materials; containment of blast cleaning and waste paint particles; disposal of the hazardous materials at a pre-approved disposal site, as required by Maryland

and Federal environmental regulations; installation of protective coating system; joint repair or replacement, and inspection to ensure compliance with environmental and contract requirements.

# Cost Change

Increase due to the addition of FY23 and FY24 to this on-going level of effort project.

# Project Justification

The benefits of this program will include extending the useful service life of existing steel bridges, prevention of long-term structural deficiencies, decreases in vehicle load restrictions, and reduced potential road closures and public inconvenience. The long-term goal of this program will be to protect existing bridges and keep them in good condition to reduce bridge renovation/replacement costs. The expected life cycle of a coating system is 15 years. Candidate bridges for each year are identified based on the bridge coating evaluations under the Biennial Bridge Inspection Program and the available funds under the bridge preservation program. The County currently has 115 Highway and 29 Pedestrian steel girder, beam and truss structures in its bridge inventory. These numbers will change when steel highway or pedestrian bridges are added into or dropped from the County's bridge inventory. The degree of specialized work required to restore the protective coatings to in-service bridges is beyond the scope of routine operations. Proper protective coating systems are an essential component of bridge maintenance to prevent long-term structural steel deterioration. The County currently has 50 bridges with deck joints in its inventory. Damage both to the joint and to the portion of the bridge beneath the joint that is exposed to debris, water and deicing salts must be addressed and prevented to prolong the life of the bridge. Many defects identified through the Biennial Bridge Inspection Program are the direct result of bridges not being properly protected to withstand chemical and environmental elements. These defects include frozen and deteriorated steel bearings, corroded structural steel, and steel beam section loss.

## Other

Seventy-three bridges have been repainted since the first contract in FY03. The "Intergovernmental" revenue shown in the funding schedule is from Howard County for its share of painting costs for two bridges that Montgomery County and Howard County share.

# Disclosures

Expenditures will continue indefinitely.

# Coordination

Maryland Department of Natural Resources, Maryland State Highway Administration, Occupational Safety and Health Administration, Maryland-National Capital Park and Planning Commission, Utilities, CSX Transportation, Washington Metropolitan Area Transit Authority, Montgomery County Department of Permitting Services, Bridge Renovation Program



CategoryTransportationDate Last Modified01/04/18SubCategoryBridgesAdministering AgencyTransportationPlanning AreaCountywideStatusOngoing

#### EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	6,792	3,015	1,602	2,175	245	950	245	245	245	245	-
Land	64	14	-	50	-	50	-	-	-	-	-
Site Improvements and Utilities	171	21	150	-	-	-	-	-	-	-	-
Construction	15,876	3,608	6,493	5,775	755	2,000	755	755	755	755	-
Other	78	78	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	22,981	6,736	8,245	8,000	1,000	3,000	1,000	1,000	1,000	1,000	-

#### FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	20,229	6,645	6,946	6,638	773	2,773	773	773	773	773	-
State Aid	2,752	91	1,299	1,362	227	227	227	227	227	227	-
TOTAL FUNDING SOURCES	22,981	6,736	8,245	8,000	1,000	3,000	1,000	1,000	1,000	1,000	-

#### APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	4,000	Year First Appropriation	FY97
Appropriation FY 20 Request	-	Last FY's Cost Estimate	18,981
Cumulative Appropriation	15,625		
Expenditure / Encumbrances	8,286		
Unencumbered Balance	7,339		

# **Project Description**

This project provides for the renovation of County roadway and pedestrian bridges that have been identified as needing repair work beyond routine maintenance levels to assure continued safe functioning. Renovation work involves planning, preliminary engineering, project management, inspection, and construction. Construction is performed on various components of the bridge structures. Superstructure repair or replacement items include decking, support beams, bearing assemblies, and expansion joints. Substructure repair or replacement items include concrete abutments, backwalls, and wingwalls. Culvert repairs include concrete headwalls, structural steel plate pipe arch replacements, installation of concrete inverts, and placement of stream scour protection. Other renovation work includes paving of bridge deck surfaces, bolted connection replacements, stone slope protection, reconstruction of approach roadways, concrete crack injection, deck joint material replacement, scour protection, and installation of traffic safety barriers. The community outreach program informs the public when road closures or major lane shifts are

necessary. Projects are reviewed and scheduled to reduce community impacts as much as possible, especially to school bus routes.

# Cost Change

Increase due to the addition of five emergency projects: Valleywood Drive Pedestrian Bridge, River Road culvert, Belfast Road culvert, Falling Creek Road culvert, and the construction costs of 25 steel culvert repairs to prevent imminent failure. Increase also due to the addition of FY23 and FY24 to this on going level of effort project.

# Project Justification

The Biennial Bridge Inspection Program, a Federally mandated program, provides specific information to identify deficient bridge elements. The bridge renovation program also provides the ability for quick response and resolution to citizen public concerns for highway and pedestrian bridges throughout the County.

## Other

The objective of this program is to identify bridges requiring extensive structural repairs and perform the work in a timely manner to avoid emergency situations and major public inconvenience. Construction work under this project is typically performed by County Division of Highway Services.

### Fiscal Note

FY16 transfer of \$1.2M in GO Bonds from Glenmont Metro Parking Expansion (#500552); \$503K in GO Bonds from Cedar Lane Road Bridge (#501105); \$32K in GO Bonds from Whites Ferry Road Bridges (#501301); and \$730K in GO Bonds from Nebel Street Extended (#500401); FY17 transfer of \$35K in GO Bonds from Valley Road Bridge (#501521), \$500K in GO Bonds from Father Hurley Blvd (#500516) and \$500K in GO Bonds from BRAC Bicycle and Pedestrian Facilities (#501000); FY18 reallocation of \$1.4M in GO Bonds from Century Blvd (#501115)

# Disclosures

Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

# Coordination

Department of Transportation, Maryland State Highway Administration, Maryland Department of Natural Resources, Maryland Historic Trust, U.S. Fish and Wildlife Service



# Brighton Dam Road Bridge No. M-0229 (P501907)

CategoryTransportationDate Last Modified01/04/18SubCategoryBridgesAdministering AgencyTransportationPlanning AreaOlney and VicinityStatusPlanning Stage

#### EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	860	-	-	860	636	111	113	-	-	-	-
Construction	1,000	-	-	1,000	-	510	490	-	-	-	-
TOTAL EXPENDITURES	1,860	-	-	1,860	636	621	603	-	-	-	-

#### FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	620	-	-	620	212	207	201	-	-	-	-
Intergovernmental	1,240	-	-	1,240	424	414	402	-	-	-	-
TOTAL FUNDING SOURCES	1,860	-	-	1,860	636	621	603	-	-	-	-

#### APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	1,860	Year First Appropriation	
Appropriation FY 20 Request	-	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

# Project Description

This project provides for the rehabilitation of the existing Brighton Dam Road Bridge No. M-0229 over Brighton Dam of Triadelphia Reservoir. This 602-foot long 15-span bridge, which is supported by Brighton Dam, is in need of repairs to the parapets and bridge roadway deck joints to enhance the safety of the traveling public and the integrity of the dam.

# Location

The project site is located at the Montgomery/Howard County Line approximately 1.2 miles east of the intersection of Brighton Dam Road and New Hampshire Avenue (MD 650) in Brookeville.

# Capacity

Upon completion, the Average Daily Traffic (ADT) on the Brighton Dam Road Bridge will remain approximately 6,000 vehicles

per day.

## Estimated Schedule

The design is expected to be completed in the spring of 2019. Construction is scheduled to start in June 2020 and be completed in August 2020.

# Project Justification

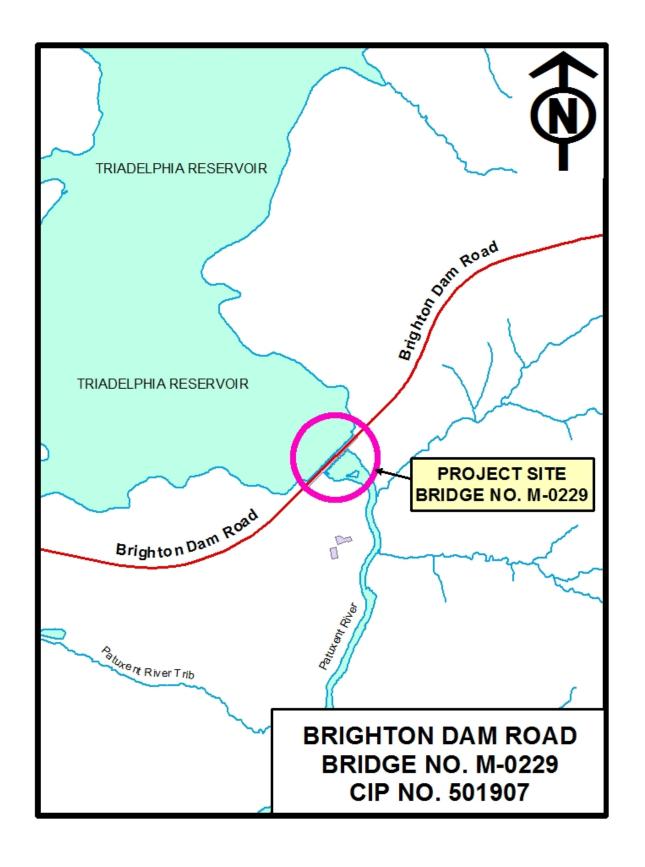
This bridge, reconstructed in 1999, requires repairs to the 1,002-foot long west parapets, 642-foot long east parapets and sixteen bridge roadway deck joints. The parapets have severe concrete spalling at many parapet joints. The bridge roadway deck joints have failed, allowing water and deicing chemicals to flow through the bridge deck which resulted in corrosion and deterioration to the mechanized equipment for the dam operations. Brighton Dam Road is classified as an arterial road in the 2005 Olney Master Plan. The deterioration of the parapets and bridge roadway deck joints was identified through the County's 2015 biennial inspection program. The bridge rehabilitation was requested by WSSC to protect the newly reconstructed dam operating equipment. Funding for this project will be shared equally between Montgomery County, Howard County and WSSC in accordance with the August 28, 1996, Agreement. A Memorandum of Understanding (MOU) between Montgomery County, Howard County, and WSSC is required for this project. The funding shown as "Intergovernmental" is from Howard County, and WSSC for their share of the project cost.

## Disclosures

A pedestrian impact analysis has been completed for this project.

## Coordination

Washington Suburban Sanitary Commission, Howard County, Maryland Department of the Environment, Maryland Department of Natural Resources, Maryland-National Capitol Park and Planning Commission, Montgomery County Department of Permitting Services, U.S. Army Corps of Engineers





# Dennis Ave Bridge M-0194 Replacement (P501701)

CategoryTransportationDate Last Modified01/04/18SubCategoryBridgesAdministering AgencyTransportationPlanning AreaKensington-WheatonStatusPlanning Stage

#### EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	760	-	40	720	60	60	40	160	400	-	-
Land	100	-	-	100	-	-	-	100	-	-	-
Site Improvements and Utilities	1,000	-	-	1,000	-	-	-	-	1,000	-	-
Construction	3,750	-	-	3,750	-	-	-	1,000	2,750	-	-
TOTAL EXPENDITURES	5,610	-	40	5,570	60	60	40	1,260	4,150	-	-

#### FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Federal Aid	3,270	-	-	3,270	-	-	-	720	2,550	-	-
G.O. Bonds	2,340	-	40	2,300	60	60	40	540	1,600	-	-
TOTAL FUNDING SOURCES	5,610	-	40	5,570	60	60	40	1,260	4,150	-	-

#### APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	40	Year First Appropriation	
Appropriation FY 20 Request	-	Last FY's Cost Estimate	5,610
Cumulative Appropriation	160		
Expenditure / Encumbrances	-		
Unencumbered Balance	160		

# Project Description

This project provides for the replacement of the existing Dennis Avenue Bridge M-0194 over a tributary to Sligo Creek. The existing bridge, built in 1961, is a single 30-foot span structure composed of pre-stressed concrete voided slabs carrying a 24-foot roadway, two 6-foot shoulders, and two 5'-8" sidewalks. The proposed replacement bridge includes a single 75-foot span structure carrying a 24-foot roadway, two 6-foot shoulders, and two 7-foot sidewalks. The project includes approach roadway work at each end of the bridge as necessary to tie-in to the existing roadway. The bridge and road will be closed to traffic during construction. Accelerated bridge construction techniques will be utilized to minimize the disruption to the traveling public and local community.

Location

The project is located on Dennis Avenue approximately 1,800 feet east of the intersection of Georgia Avenue and Dennis Avenue.

# Capacity

The roadway Average Daily Traffic (ADT) is approximately 14,000 and the roadway capacity will not change as a result of this project.

## Estimated Schedule

The design of the project is expected to finish in the spring of 2021. Land will be purchased in 2021. Construction is scheduled to start in spring 2022 and be completed in summer 2022. Dennis Avenue will be closed to vehicular traffic during the summer of 2022.

# Project Justification

The proposed replacement work will mitigate the frequent flooding of five residential properties and local streets upstream of the bridge; mitigate occasional roadway flooding on Dennis Avenue that causes significant traffic delays; and eliminate annual maintenance repairs required for this deteriorating structure. The existing bridge is rapidly deteriorating and is nearing the end of its estimated service life.

## Other

The 1989 Kensington-Wheaton Master Plan designates Dennis Avenue as Arterial (A-59) with a minimum right-of-way of 80 feet. The County Bikeways Functional Masterplan designates Dennis Avenue as a signed, shared roadway (SR-55). Streetlights, crosswalks, sidewalk ramps, bikeways and other pertinent issues are being considered in the design of the project to ensure pedestrian safety.

# Disclosures

A pedestrian impact analysis will be performed during design or is in progress.

# Coordination

Montgomery County Department of Environmental Protection, Maryland Department of the Environment, Maryland National Capital Park and Planning Commission, Montgomery County Department of Permitting Services, Utilities, Wheaton Regional Dam Flooding Mitigation (CIP Project #801710)



CategoryTransportationDate Last Modified01/04/18SubCategoryBridgesAdministering AgencyTransportationPlanning AreaGermantown and VicinityStatusFinal Design Stage

#### **EXPENDITURE SCHEDULE (\$000s)**

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	2,646	-	-	-	-	-	-	-	-	-	2,646
Land	250	-	-	250	-	-	-	-	250	-	-
Site Improvements and Utilities	145	-	-	-	-	-	-	-	-	-	145
Construction	25,309	-	-	5,000	-	-	-	-	-	5,000	20,309
TOTAL EXPENDITURES	28,350	-	-	5,250	-	-	-	-	250	5,000	23,100

#### FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	28,350	-	-	5,250	-	-	-	-	250	5,000	23,100
TOTAL FUNDING SOURCES	28,350	-	-	5,250	-	-	-	-	250	5,000	23,100

#### APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	-	Year First Appropriation	
Appropriation FY 20 Request	-	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

# **Project Description**

This project provides for the construction for the extension of Dorsey Mill Road from Century Boulevard to Milestone Center Drive for approximately 1,500 feet including a bridge over I-270 and the reconstruction of Dorsey Mill Road from Milestone Center Drive to Observation Drive for approximately 1,000 feet. The improvements will provide a new 4-lane divided roadway (one 11-foot outside lane and one 10.5-foot inside lane in each direction), a distance of approximately 0.5-miles, within a 150' minimum right-of-way. A 10-foot shared use path on the south side, a 7-foot sidewalk on the north side and a 7-foot one-way separated bike lane for each direction, in compliance with ADA requirements, will provide connectivity for the existing sidewalks and shared use paths along Century Boulevard, Milestone Center Drive, Observation Drive, Waters Hollow Road and Found Stone Road that intersect with Dorsey Mill Road. An 8-foot on-road parking space is proposed on both sides along the Dorsey Mill Road from Milestone Center Drive to Observation Drive to accommodate the existing condition that outside lanes are being used for parking by the adjacent townhouse communities. Based on the traffic analysis for the intersection with Century Boulevard, Milestone Center Drive, and Observation Drive respectively, traffic signals will be installed at an intersection if it is

warranted and protected intersections for bike lanes will be provided as appropriate. The proposed roadway bridge over I-270 will be a dual bridge with a 42'-0" wide longitudinal opening to accommodate the future Corridor City Transitway (CCT) bridge. The footings and a portion of the abutments and pier of the CCT bridge will be constructed under this project to minimize impacts to the I-270 traffic during the future construction of the CCT bridge.

## Location

Dorsey Mill Road from Century Boulevard to Observation Drive in Germantown

## Estimated Schedule

The design including application for permits is underway by Black Hills Germantown, LLLP (BHG), the developer of the Black Hills subdivision, under an agreement (MOU) with the County and is expected to finish in the Spring 2019. The land acquisition is projected in FY23. The construction is projected from FY24 to FY27.

# Project Justification

The vision of the project is to provide multi-modal access, improve mobility and safety for local travel, and enhance pedestrian, bicycle, and vehicular access and connectivity to existing residential, commercial, parks, and recreational area and planned mixed-use developments on both sides of I-270 in the vicinity of the Germantown Town Center urban area. This project is needed to provide the east-west transportation improvement completing the master planned Dorsey Mill Road that will connect Century Boulevard on the west side I-270 with Observation Drive on the east side of I-270. The latest planned mixed-use developments in the vicinity (the Black Hills subdivision on the west side of I-270) and the Milestone subdivision on the east side of I-270 provides for a total of 1,574 units of multi-family dwellings, 2,119,062 square feet of commercial space, and 140 assisted living facility units.

## Other

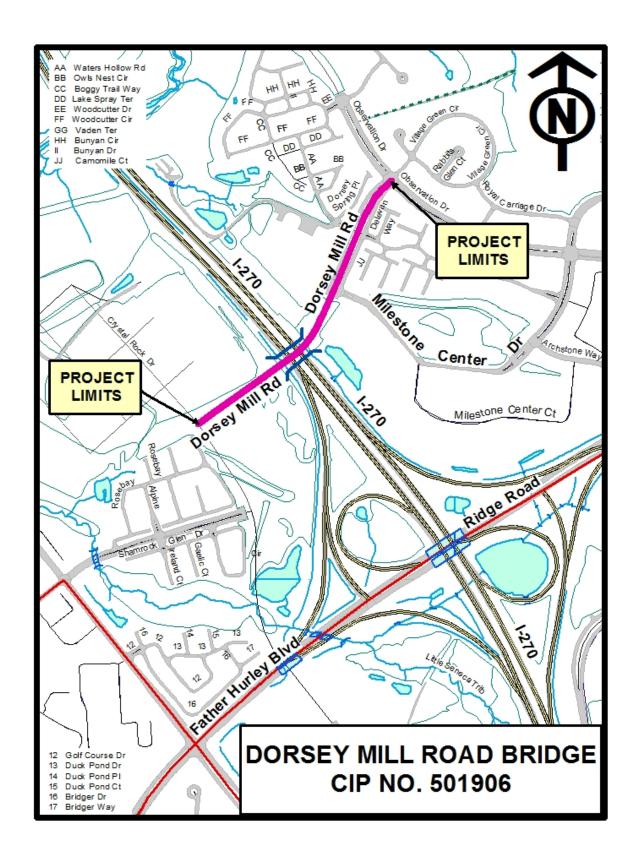
The 2009 Germantown Employment Area Sector Plan designates Dorsey Mill Road from Century Boulevard to Observation Drive as a 4-lane Business District Road B-14 and Corridor Cities Transitway with 150' right-of-way and shared use path SP-66. Corridor Cities Transitway proposes a station at the median of the Dorsey Mill Road between Milestone Center Drive and Observation Drive. BHG is responsible for the design and permits. BHG is proceeding with design at its expense under terms of an MOU. The County agrees to certify impact tax credits to BHG for all design costs eligible for impact tax credits pursuant to Section 52-55 of the Montgomery County Code ("Impact Tax Credits"). The County is responsible for the land acquisition and construction.

# Disclosures

A pedestrian impact analysis has been completed for this project.

# Coordination

Maryland State Highway Administration, Maryland Transit Administration, Maryland Department of the Environment, Maryland-National Capital Park and Planning Commission, Montgomery County Department of Permitting Services, Montgomery County Department of Environmental Protection, Utilities, Lerner (Managing Agent for BHG)





CategoryTransportationDate Last Modified01/04/18SubCategoryBridgesAdministering AgencyTransportationPlanning AreaOlney and VicinityStatusFinal Design Stage

#### EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	945	1	544	400	400	-	-	-	-	-	-
Land	314	26	288	-	-	-	-	-	-	-	-
Site Improvements and Utilities	365	-	315	50	50	-	-	-	-	-	-
Construction	4,843	-	1,841	3,002	3,002	-	-	-	-	-	-
TOTAL EXPENDITURES	6,467	27	2,988	3,452	3,452	-	-	-	-	-	-

#### FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Federal Aid	3,054	-	1,179	1,875	1,875	-	-	-	-	-	-
G.O. Bonds	3,413	27	1,809	1,577	1,577	-	-	-	-	-	-
TOTAL FUNDING SOURCES	6,467	27	2,988	3,452	3,452	-	-	-	-	-	-

#### OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Maintenance	5	-	1	1	1	1	1
NET IMPACT	5	-	1	1	1	1	1

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	1,168	Year First Appropriation	FY13
Appropriation FY 20 Request	-	Last FY's Cost Estimate	5,299
Cumulative Appropriation	5,299		
Expenditure / Encumbrances	27		
Unencumbered Balance	5,272		

# Project Description

This project provides for the replacement of the existing Gold Mine Road Bridge over Hawlings River and the construction of an 8'-0" bike path between James Creek Court and Chandlee Mill Road. The existing bridge, built in 1958, is a one span 30' steel beam with an asphalt filled corrugated metal deck structure carrying a 15'-8" clear roadway with W-beam guardrail on each side,

for a total deck width of 16'-7". The proposed replacement bridge includes a one span 53' prestressed concrete slab beam structure with a 33'-0" clear roadway width. The project includes 250' of approach roadway work at each end of the bridge that consists of widening and raising the roadway profile by 5' at the bridge. The new bridge will carry 2 lanes of traffic, improve sight distances at the bridge, raise the bridge elevation to reduce flooding at the roadway, carry all legal vehicles, and provide pedestrian facilities across the river.

#### Location

The project site is located along Gold Mine Bridge Road over the Hawlings River. It includes a bike path between James Creek Court and Chandlee Mill Road.

## Estimated Schedule

The design of the project is expected to finish in fall of 2017. The construction is scheduled to start in summer of 2018 and be completed in summer of 2019.

# Cost Change

Cost increase due to additional stream maintenance work required for park permit by the Maryland-National Capital Park and Planning Commission.

# Project Justification

The proposed replacement work is necessary to provide a safe roadway condition for the traveling public. The 2009 bridge inspection revealed that the concrete abutments and wing walls are in fair condition and the bridge has a weight restriction which is controlled by the undersized steel beams. The bridge is currently on a 6-month inspection cycle to allow some school buses to exceed the inventory rating values of the beams. The bridge is functionally obsolete, carries two lanes of traffic on a single lane bridge with no sidewalks and has inadequate sight distance approaching the bridge. The bridge is closed two to three times a year due to flooding of the Hawlings River.

# Other

This project also supports the County Executive's Vision Zero initiative which aims to reduce injuries and fatalities on all roads.

# Fiscal Note

The costs of bridge construction and construction management for this project are eligible for up to 80 percent Federal Aid. The design costs for this project are covered in the "Bridge Design" project (C.I.P. No. 509132).

# Disclosures

A pedestrian impact analysis has been completed for this project.

# Coordination

Federal Highway Administration - Federal Aid Bridge Replacement/Rehabilitation Program, Maryland State Highway Administration, Maryland Department of the Environment, Maryland-National Capital Park and Planning Commission, Montgomery County Department of Permitting Services, Utilities, Bridge Design PDF (CIP 509132)

