



Old Frederick Road Slope Stabilization Project

Public Information Meeting

Thursday, August 22, 2024 | Catonsville Senior Center (501 Rolling Road)

We will begin shortly. The Public Meeting will be recorded.

> Project Team

Baltimore County Department of Public Works and Transportation (BCDPWT)

- Nicholas Smith Chief, Structural Design Section
- Hiwotie Wondem Project Manager

Johnson, Mirmiran & Thompson, Inc. (JMT) – Prime Consultant **AB Consultants, Inc. (ABC) – Sub-consultant**

- John H. Seifert Project Manager (JMT)
- Paul Marotta Assistant Project Manager (JMT)
- Sanjay Patel Project Manager (ABC)

> Purpose of the Meeting

- 01 Introduce project team
- 02 Present the existing slope condition
- 03 Present the project scope and proposed slope condition
- 04 Present maintenance of traffic during construction
- 05 Present current project cost estimates, funding and schedule
- 06 Obtain community input

> Project Location



> Existing Traffic and Corridor Data

2024 Traffic Counts

- Approximately 2,214 vehicles/day during weekdays

Posted Speed Limit

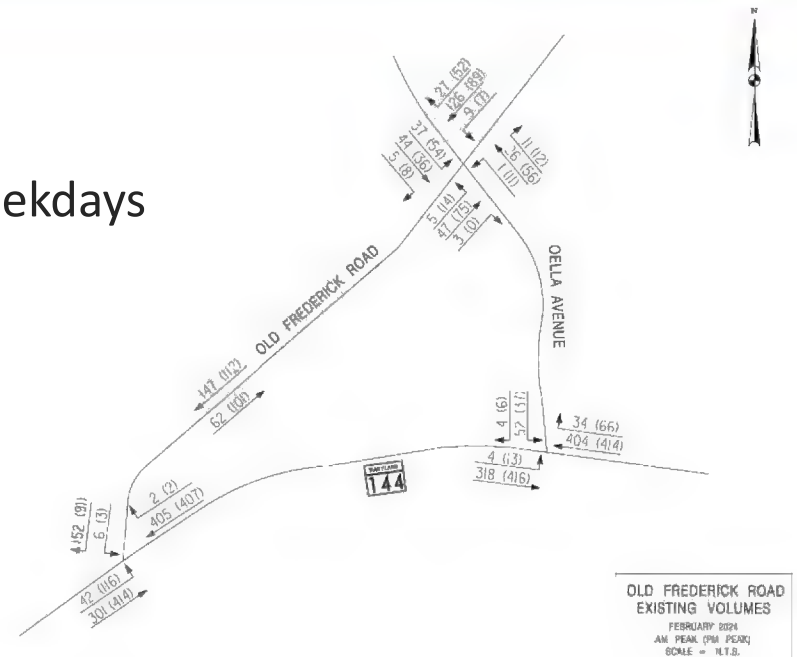
- 25 MPH
- 20 MPH advisory speed around curve

Posted Weight Restriction

- No Thru Traffic over 5 Tons

Accident Data

- Minimal crash history within project vicinity



> Existing Condition

Roadway

- Two lane road
- Roadway width varies between 17 and 20ft
- Narrow lane widths
- Temporary barrier and slope encroaching on roadway
- Drainage inlets north and south of barrier

Benjamin Banneker Park Red Trail

- Trail location beyond limits of slope stabilization

Subsurface

- Residual soil, decomposed rock and bedrock layers



Depth (ft)	Description	Depth (ft)	Description
0	1' above of surface	0	1' above of surface
0-1	Light brown, moist, loose, silty SAND (Standard Soil)	0-2	Refer to boring log for description of material encountered from 0.0' to 1.0'
1-2	Light brown, moist, medium-dense, silty SAND (Standard Soil)	2-3	Light gray, dry, very dense, silty SAND, with rock fragments (Decomposed Rock)
2-3	Light brown / brown, dry, dense, silty SAND, trace rock fragments (Standard Soil)	3-4	Bottom of boring @ 2.1 ft
3-4	Light brown / brown, dry, dense, silty SAND, trace rock fragments (Standard Soil)	4-5	
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> Slope Failure Event

Severe Rain Event

- Spring 2018
- Flooded nearby Ellicott City
- 8 inches in about 2 hours
- Significant erosion
- Steep hillside sloughed into roadway
- Temporary barrier placed
- Relocated existing Red Trail



> Existing Slope Deterioration



**Steep hillside
overhanging roadway**



**Uprooted tree up
slope due to erosion**



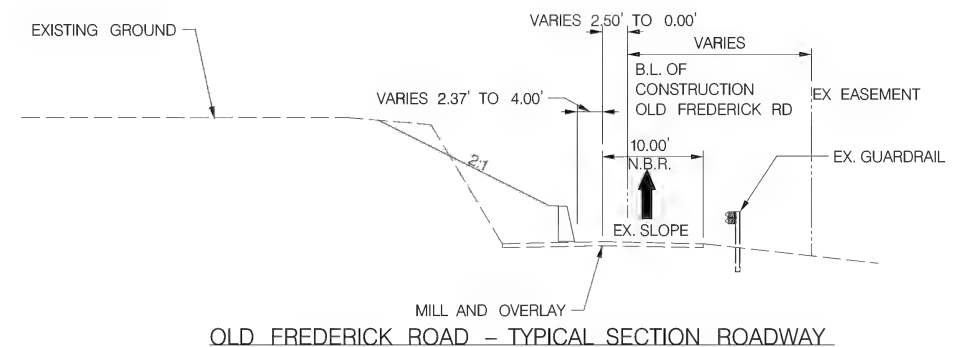
**Uprooted tree adjacent
to abandoned trail**

> Alternative Analysis Study

Total Approved Project Budget: \$1.14 Million

Phase 1 - Alternative Analysis Study

- Traffic Impact and Detour Study
- Tree Identification and Delineation Memorandum
- Water Resources Design Memorandum
- Studied five slope stabilization alternatives
 - Three retaining wall options
 - Two barrier wall options
- Studied three roadway alternatives
 - Two Lanes
 - One Lane with bike lanes
 - One Lane with reduced shoulder
- Barrier wall with one lane and reduced shoulder was determined to be the only viable option with the available budget

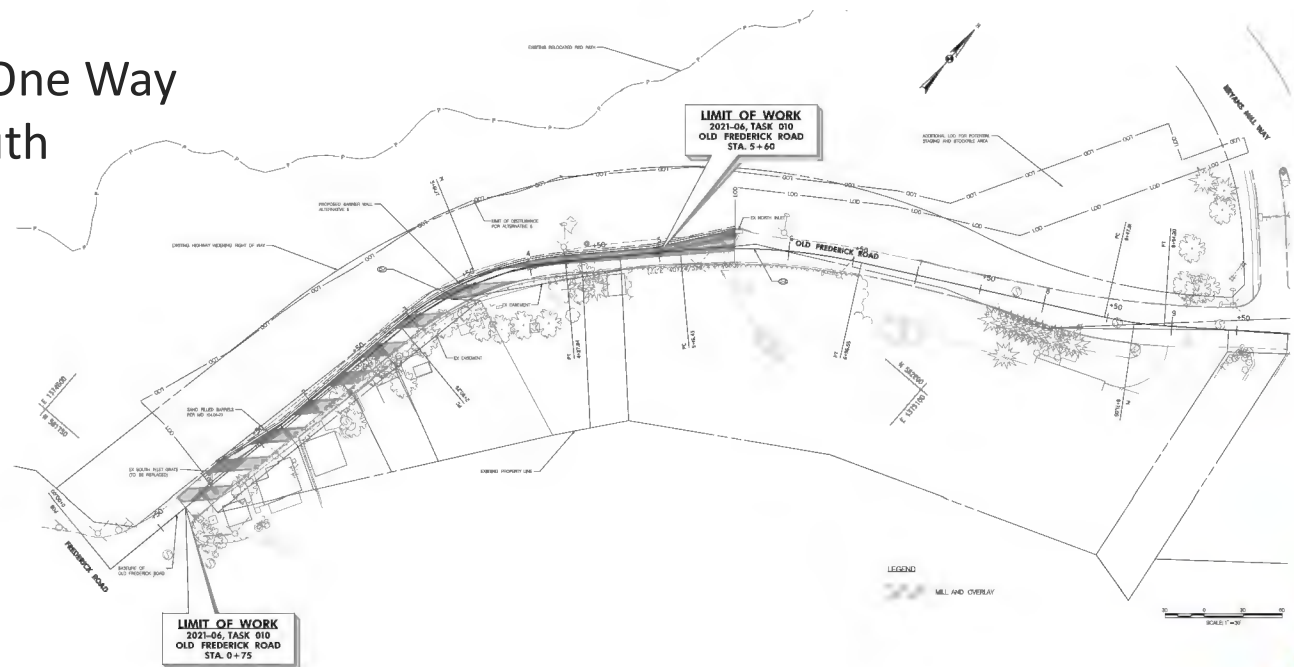


Next Phase - Final Design and Construction

> Project Scope

Proposed Improvements

- Slope Stabilization
- Landscaping
- Construction of new permanent traffic barrier
- Repaving of roadway
- Roadway restricted to One Way
- Modification to the south drainage inlet



> Proposed Barrier Wall



Existing Condition

Two lane road with temporary barrier

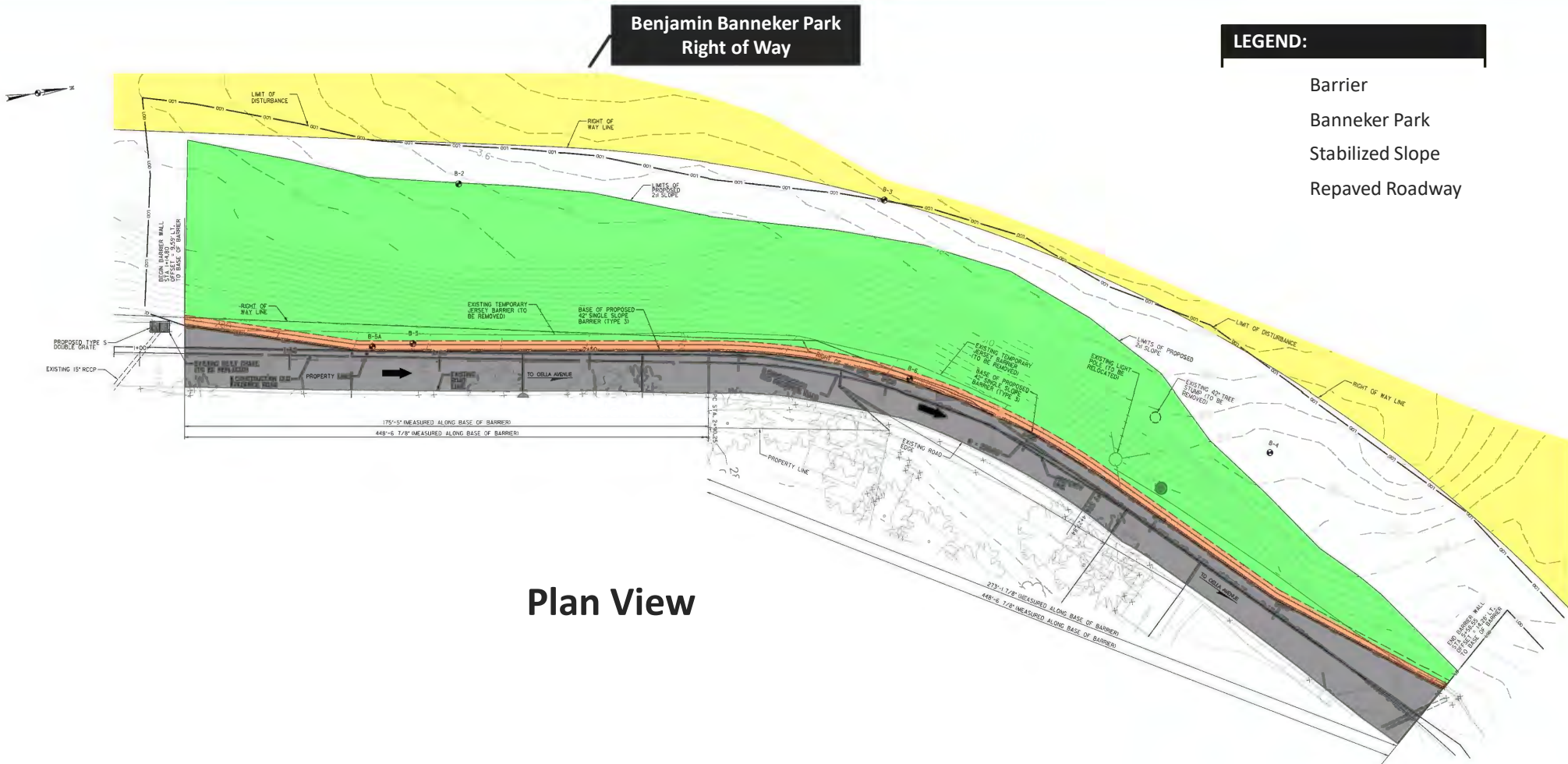
Photograph taken looking from Old Frederick Rd towards Frederick Rd



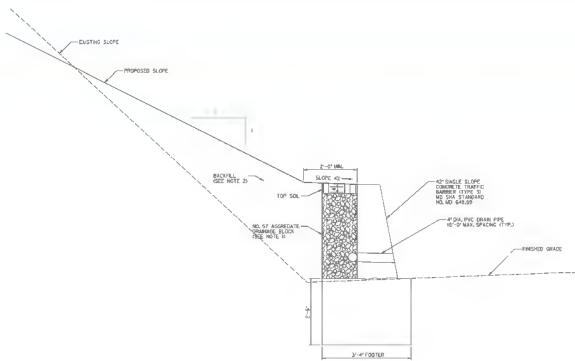
Proposed Rendering

One lane road with permanent barrier

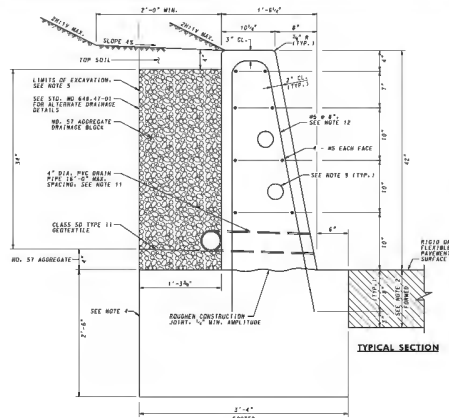
> Proposed Barrier Wall Plans



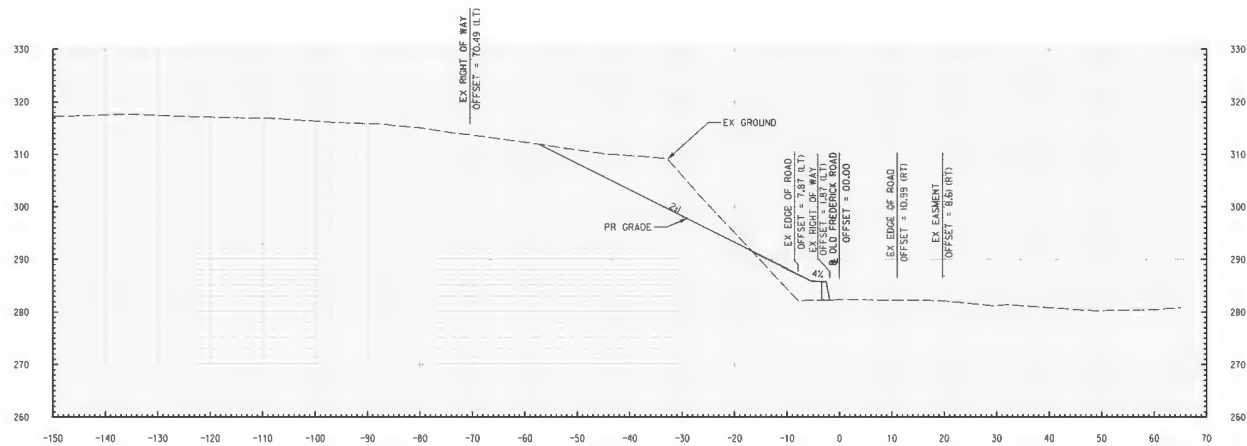
> Proposed Barrier Wall Plans



Barrier Wall Section



Standard 42" Maryland Barrier



Cross Section

Barrier along roadway with 2:1 proposed back slope

> Barrier Wall Finish Options



Smooth Concrete Finish



Stamped Form Liner Finish

Stained to match surrounding rock



Sample Finish

> Forest and Tree Impact

Forest Stand 1

- Fair to poor condition with signs of disease
- Abundance of invasive species
- No specimen or state champion trees identified
- Baltimore County Environmental Impact Review Permit required for disturbance

Roadside Trees

- Maryland Department of Natural Resources Permit required for disturbance

Tree Removal

- Estimated approximately 70 trees to be removed

Landscaping Proposed on Slope



> Proposed Traffic Pattern

One Way Traffic

- Conducted NE and SW directional traffic analysis
- Similar, acceptable traffic operations
- MD 144 provides a left turn bypass lane for NE bound traffic (not provided at Oella Ave)
- Recommended Direction of Traffic: NE bound traffic from Old Frederick Road to Bryans Mill Way

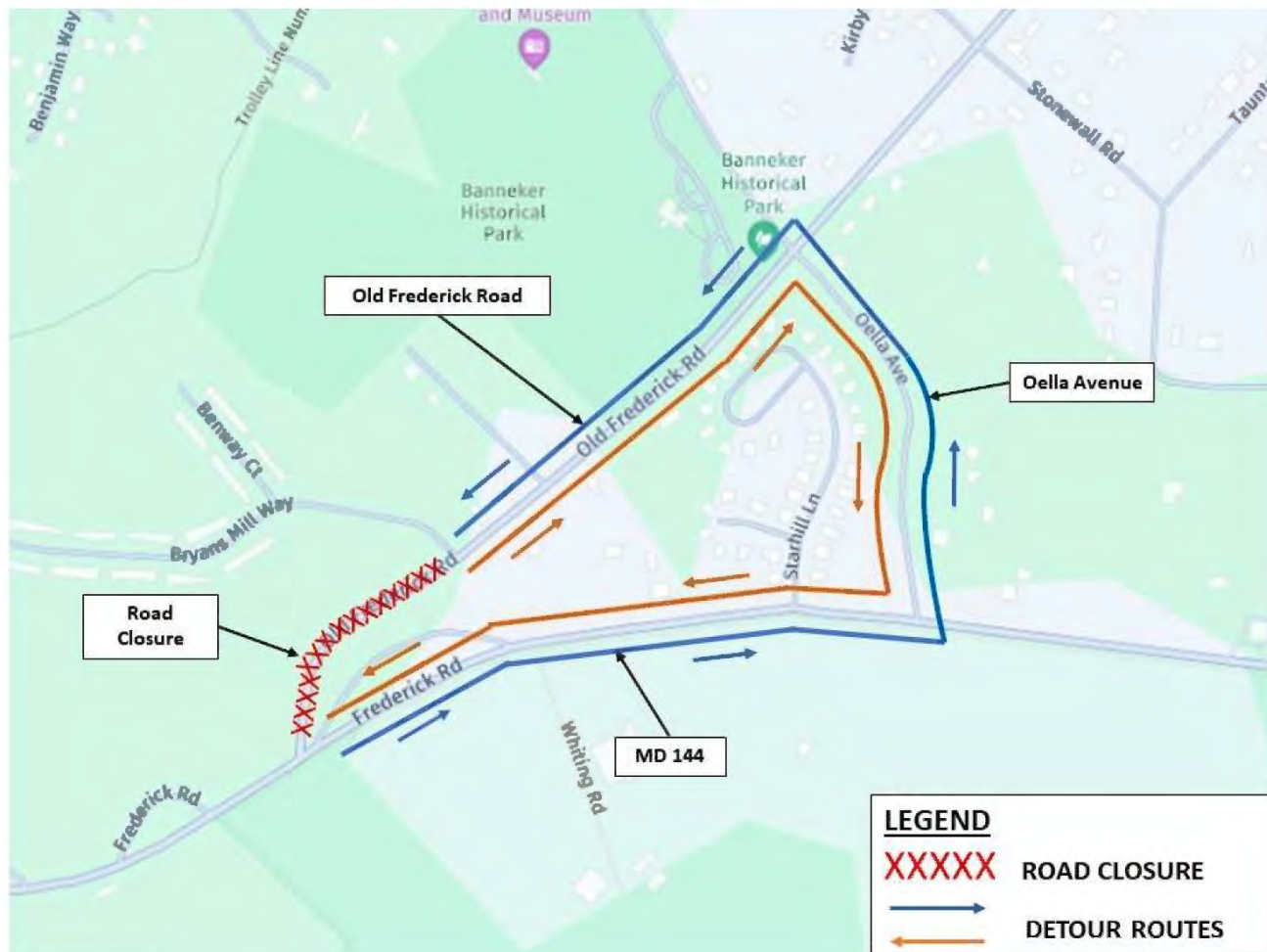




Maintenance of Traffic During Construction

Detour Route

- Old Frederick Road – Oella Avenue – Frederick Road
- 3-minute travel time
- 1 mile long
- Acceptable traffic operations along detour route



> Current Project Cost Estimates and Funding

Project Status

- Preliminary Design Stage (30% Level of Completion)
 - Alternative Analysis Study complete

Project Funding

- Baltimore County FY24 Capital Budget

Construction Cost Estimate

- \$850,000 Construction and Construction Management Cost (Funded)

> Project Schedule



**Alternative
Analysis Study
Complete**
August 2024



Design Complete
December 2025



Begin Construction
Late Spring 2026 (Tentative)



End Construction
Late Fall 2026 (Tentative)

> Next Step and Community Input

Proceed with Final Design based on

- Feedback from the community
 - Tonight's feedback
 - Email to oldfrederickroad@baltimorecountymd.gov

Final Design Milestones

- Permitting Approvals
- Concurrence with:
 - Baltimore County Department of Recreation and Parks
- Final Design Complete

For Project
Information

Contact us:

Hiwotie Wondem

BCDPWT Project Manager

Towson, Maryland

410-887-3737

oldfrederickroad@baltimorecountymd.gov

Access project webpage:

[https://www.baltimorecountymd.gov/departments/
public-works/engineering/projects](https://www.baltimorecountymd.gov/departments/public-works/engineering/projects)



Email



Webpage



Questions?