



Maryland Transportation Authority

CAPITAL COMMITTEE MEETING

THURSDAY, MARCH 2, 2023

2310 BROENING HIGHWAY
BALTIMORE, MARYLAND 21224

CAPITAL COMMITTEE MONTHLY MEETING
March 2, 2023 – 9:00 AM

This meeting will be livestreamed on the [MDTA Capital Committee Page](#)

NOTE: This is an Open Meeting being conducted via livestreaming. The public is welcomed to watch the meeting at the link listed above. *If you wish to comment on an agenda item please email your name, affiliation, and the agenda item to esogard@mdta.state.md.us no later than 3:00 p.m. on Monday, February 27, 2023. You MUST pre-register in order to comment.* Once you have pre-registered you will receive an email with all pertinent information.

AGENDA

OPEN SESSION – 9:00 a.m.

Call Meeting to Order

- | | | |
|---|----------------|---------|
| 1. <u>Approval</u> - Open Session Meeting Minutes of February 2, 2023 | Chairman | 5 mins |
| 2. <u>Update</u> – I-895 over Herring Run Erosion & Scour Mitigation Project | Peter Mattejat | 15 mins |

Vote to Adjourn Meeting

**MARYLAND TRANSPORTATION AUTHORITY
CAPITAL COMMITTEE MEETING
THURSDAY, FEBRUARY 2, 2023
OPEN MEETING VIA LIVESTREAMING**

OPEN SESSION

MEMBERS ATTENDING: Mario J. Gangemi – Chairman
William C. Ensor, III
William H. Cox, Jr.
W. Lee Gaines

STAFF ATTENDING: Will Pines
Brian Wolfe
Donna DiCerbo
Jeanne Marriott
Jennifer Stump
Kimberly Millender
Christopher Imms
Eric Willison
Mary O’Keefe
Selena McKissick
Natalie Henson
Ganine Steffe
Liz Zito-Lynch

Member Gangemi called the meeting of the Maryland Transportation Authority (MDTA) Capital Committee to order at 9:00 a.m. The meeting was held via video conference and livestreamed on the MDTA Board Meeting web page.

APPROVAL – OPEN SESSION MEETING MINUTES OF JANUARY 5, 2023

Upon motion by Member Cox and seconded by Member Gaines, the Open Session meeting minutes of the Capital Committee’s meeting held on January 5, 2023, were unanimously approved.

UPDATE – KB3005-0000 MAJOR PROJECTS PRESENTATION

Mr. Wolfe provided the MDTA Capital Committee with an overview of the KB3005 Major Projects.

There being no further business, the meeting of the MDTA Capital Committee was adjourned by consensus at 9:21 a.m. following a motion by Member Gaines and seconded by Member Ensor.

The next meeting of the MDTA Capital Committee is scheduled for Thursday, March 2, 2023, at 9:00 a.m. at Point Breeze Headquarters, 2310 Broening Highway, Baltimore, Maryland.

APPROVED AND CONCURRED IN:

Mario J. Gangemi, Chairman

I-895 over Herring Run Erosion & Scour Mitigation Project



Maryland
Transportation
Authority

Office of Engineering & Construction

Peter Mattejat, P.E.
Environmental Manager

Ruel Sabellano, P.E.
Structures Manager

RK&K

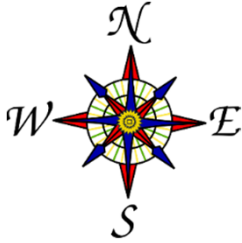
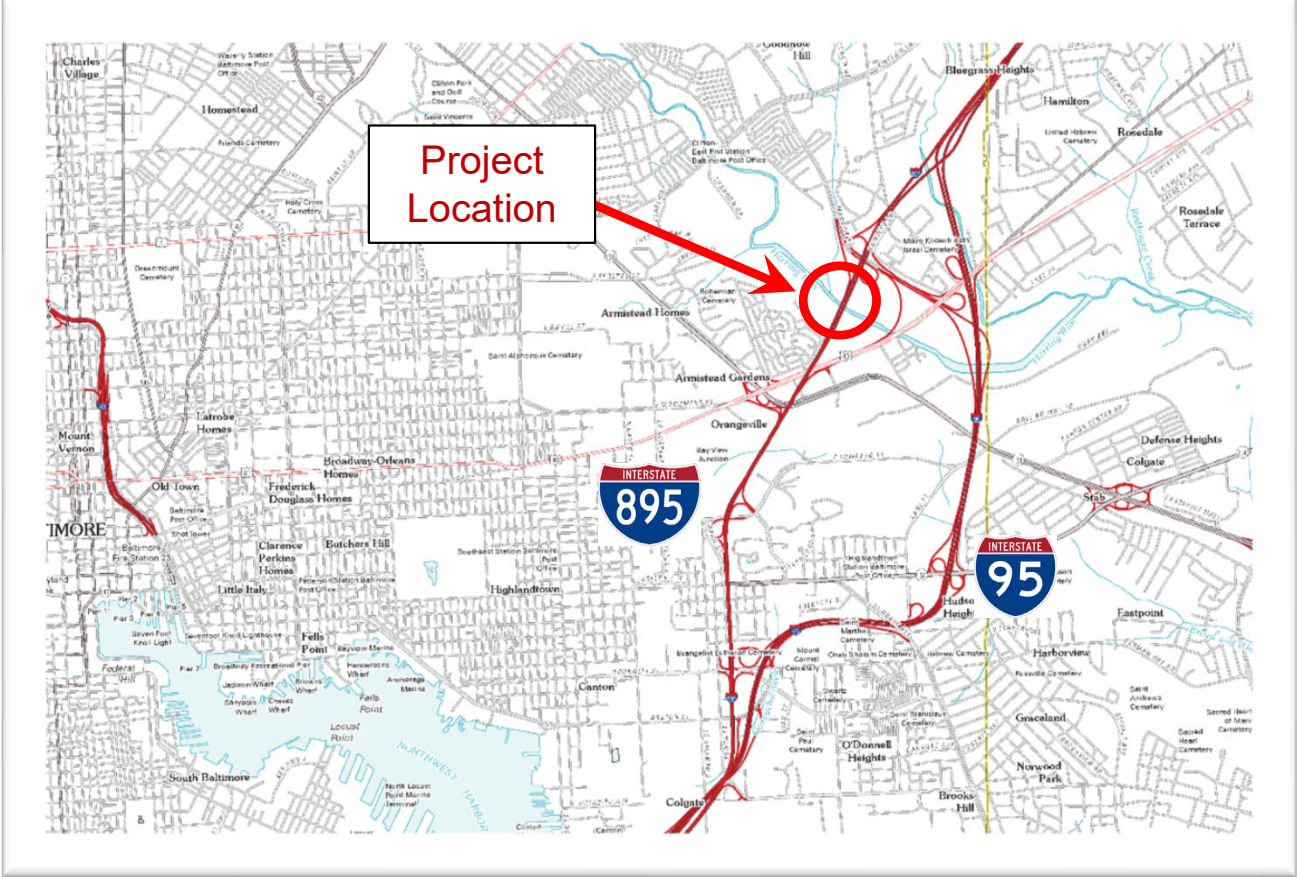
Brawner
BUILDERS

I-895 over Herring Run

- **Site Description**
- **The Threat**
- **How Did This Happen?**
- **Remediation**
- **Summary**

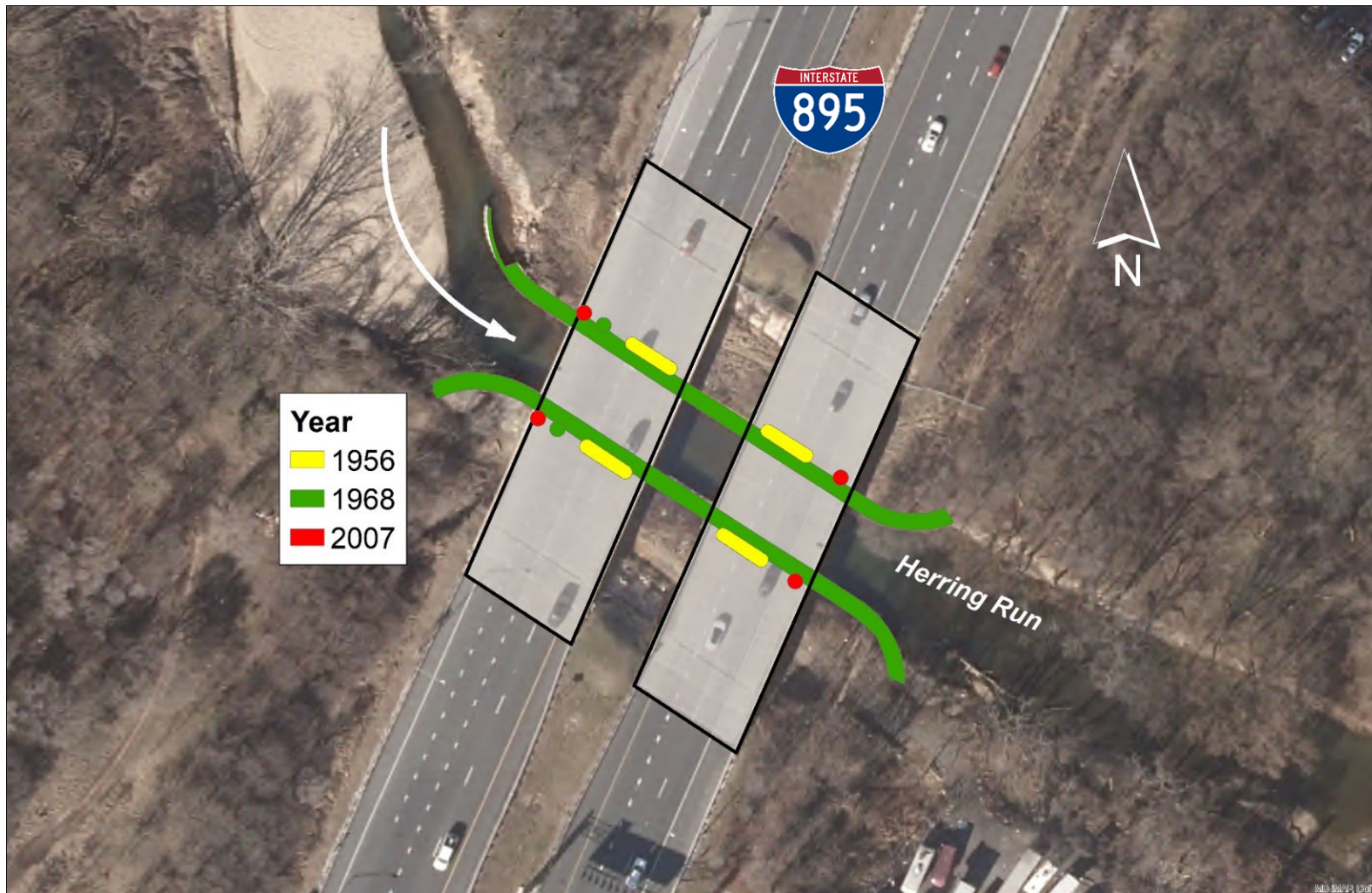
I-895 over Herring Run

SITE DESCRIPTION



I-895 over Herring Run

SITE DESCRIPTION



I-895 over Herring Run

SITE DESCRIPTION



View Downstream

I-895 over Herring Run

SITE DESCRIPTION



Pier 1



Pier 2

View Upstream

I-895 over Herring Run

THE THREAT



Upstream Pier 2



Erosion of embankment & scour of sheetpile wall

I-895 over Herring Run

THE THREAT

2019



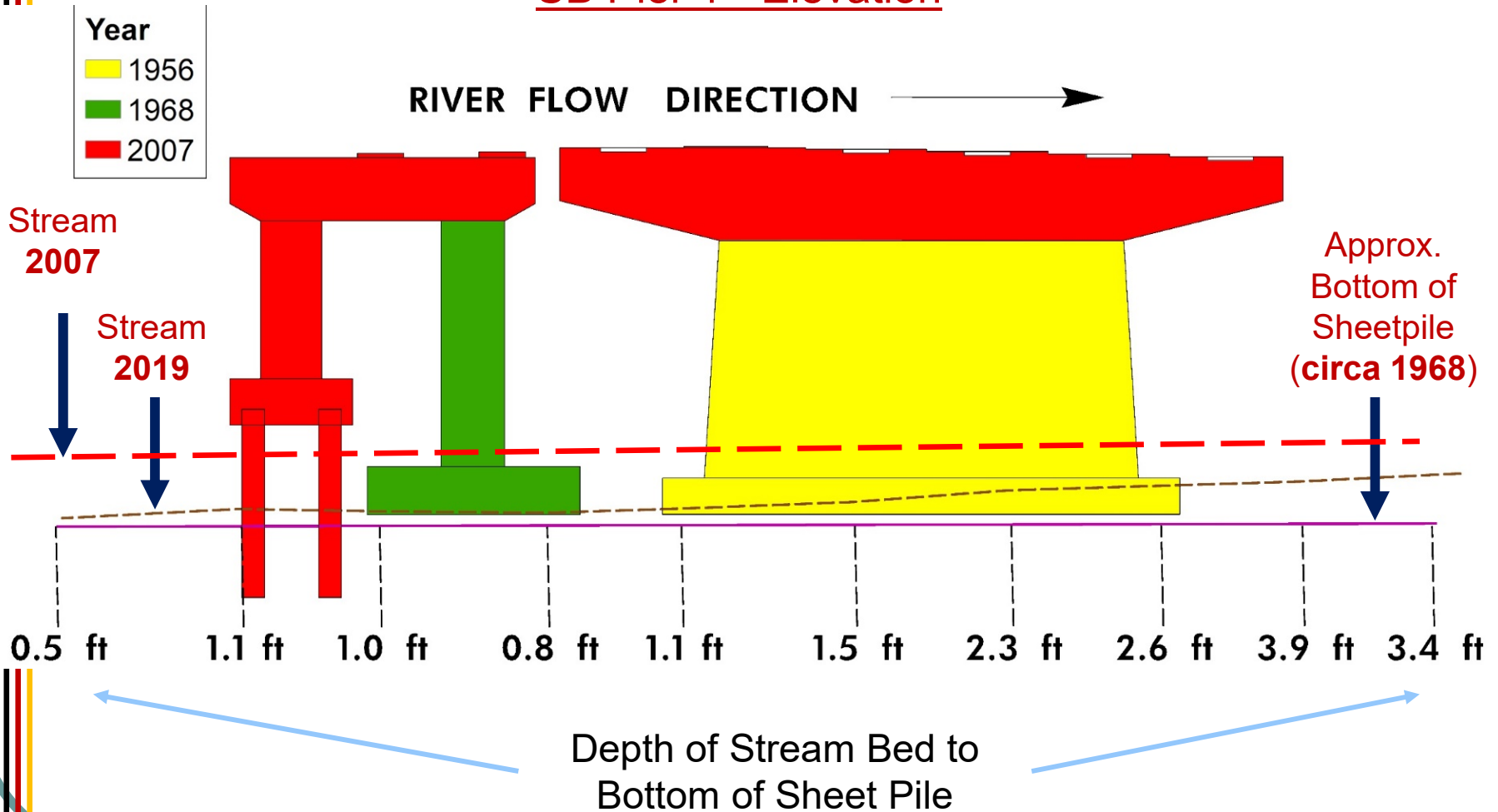
Scour of stream bed &
base of sheetpile wall

South Sheetpile Wall at Pier 1
Looking Downstream

I-895 over Herring Run

THE THREAT

SB Pier 1 - Elevation



I-895 over Herring Run

HOW DID THIS HAPPEN?

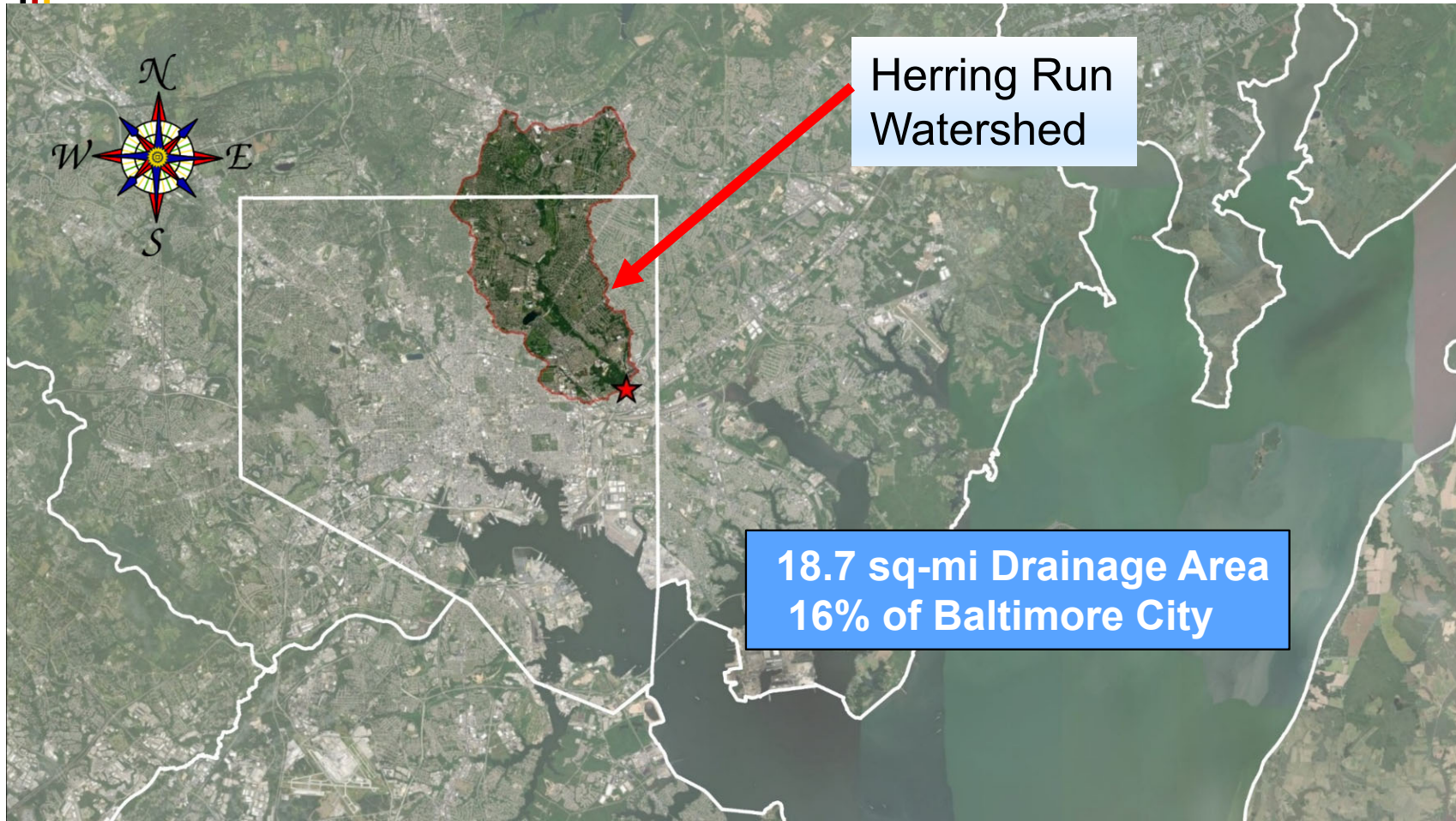
Key Factors

- Intense Watershed Urbanization
- Physiographic Transition (Piedmont to Coastal Plain)
- Extreme Precipitation – Flash Discharges
- River offset from Bridge Opening (angle of attack)



I-895 over Herring Run

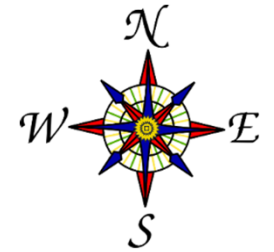
HOW DID THIS HAPPEN?



I-895 over Herring Run

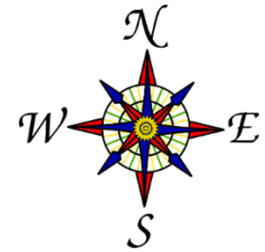
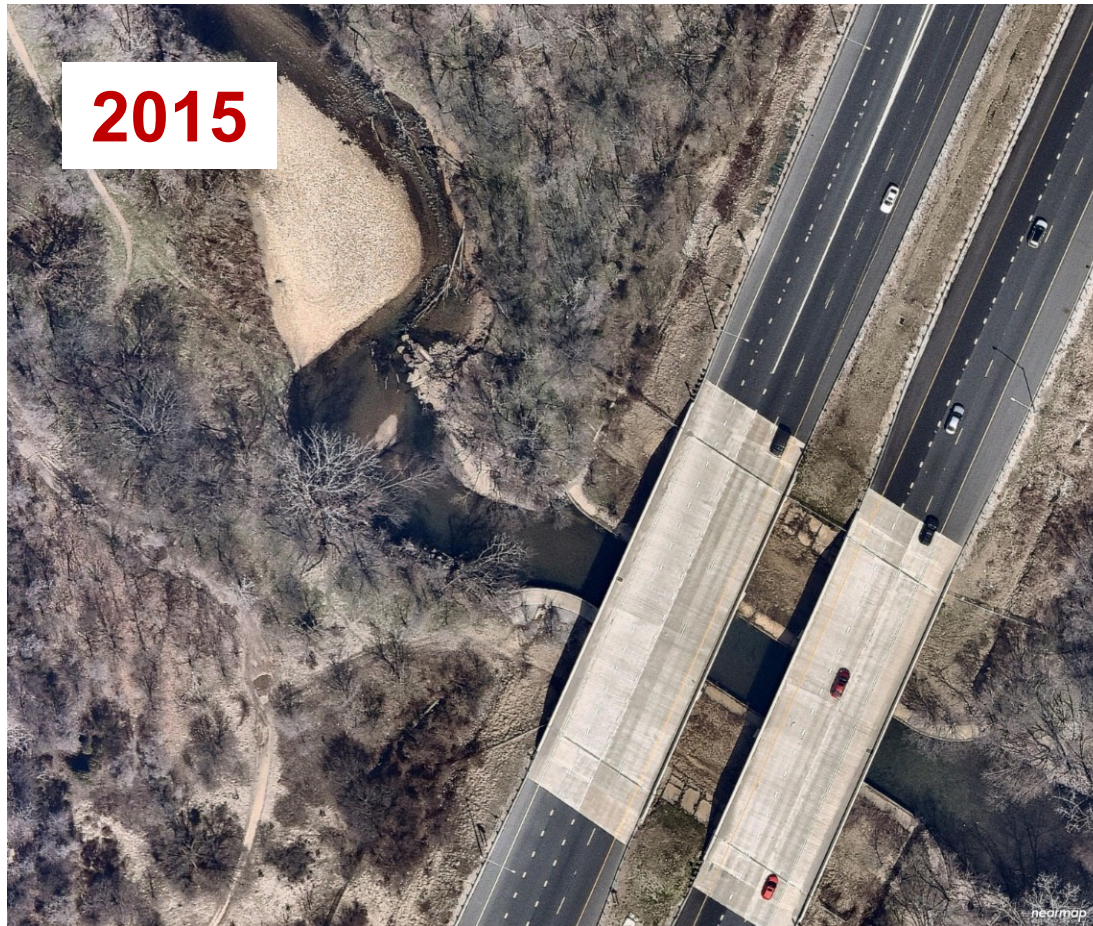
HOW DID THIS HAPPEN?

1959



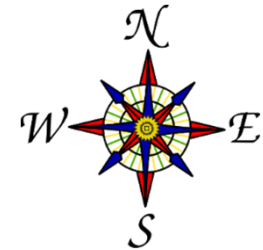
I-895 over Herring Run

HOW DID THIS HAPPEN?



I-895 over Herring Run

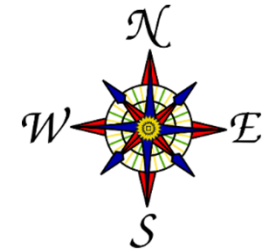
HOW DID THIS HAPPEN?



March 5, 2017

I-895 over Herring Run

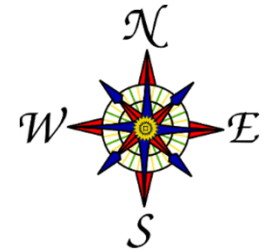
HOW DID THIS HAPPEN?



March 11, 2018

I-895 over Herring Run

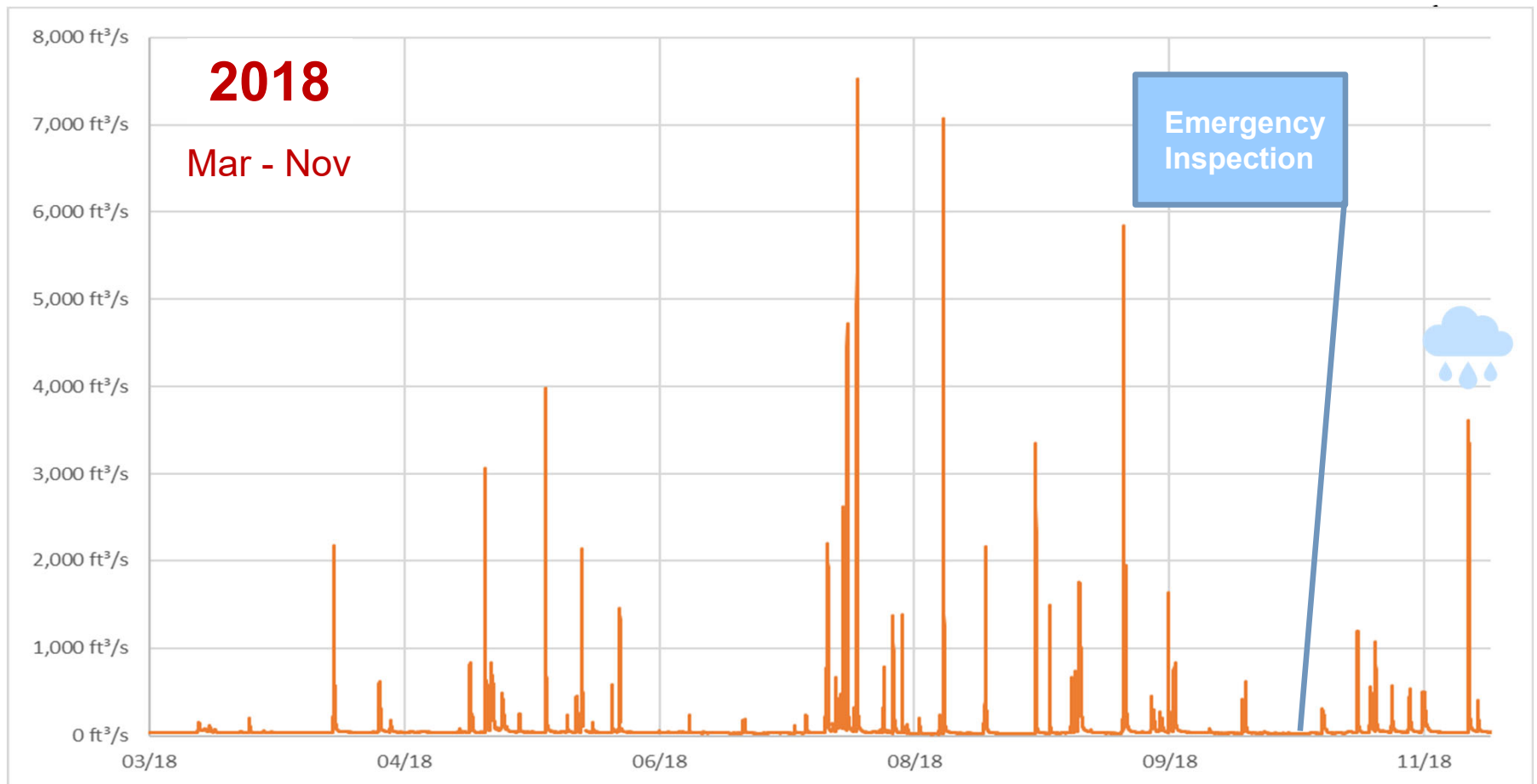
HOW DID THIS HAPPEN?



November 29, 2018

I-895 over Herring Run

HOW DID THIS HAPPEN?



I-895 over Herring Run

REMEDIATION

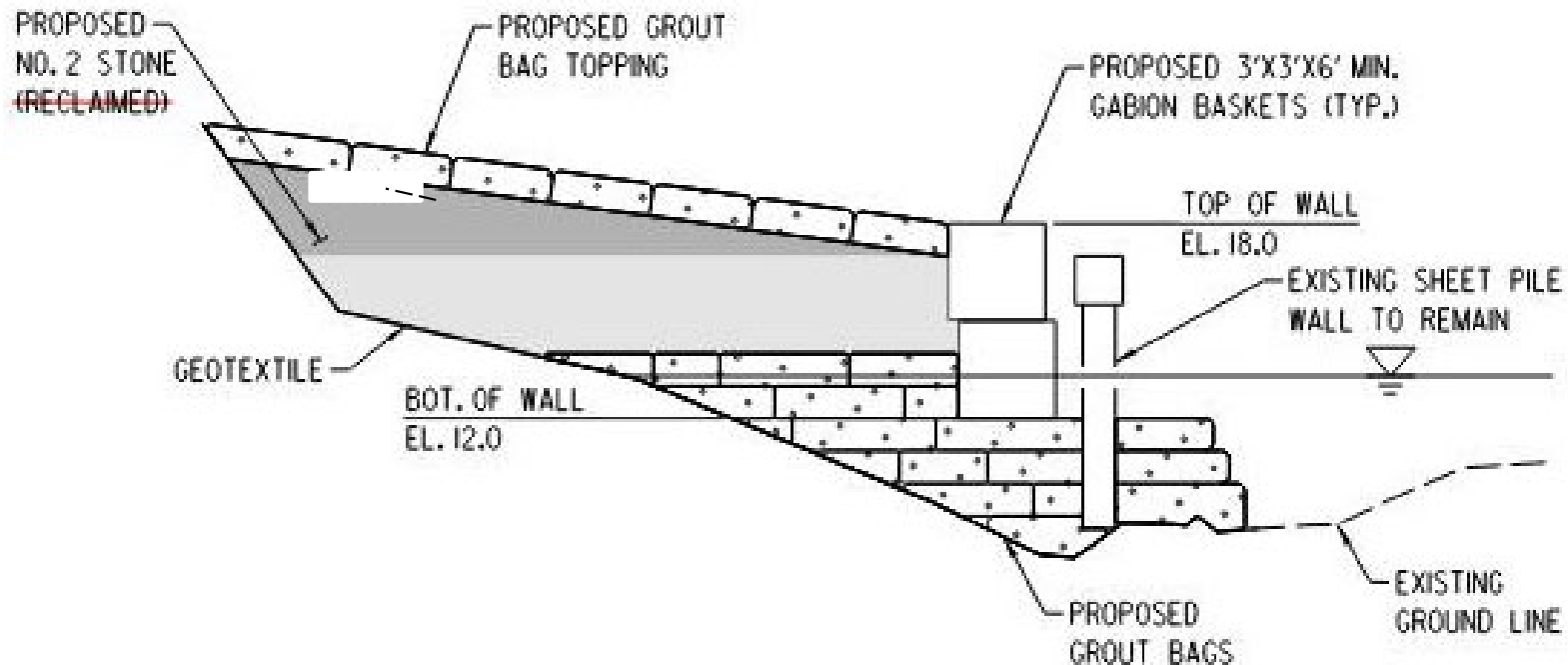
Remedial areas:

- **Upstream sheetpile wall / embankment at Pier 2**
- **Upstream channel sediment bar**
- **Channel & sheetpile wall under bridge for Piers 1 & 2**
- **Overbanks under bridge**

Remedial approach:

- **Emergency Task Orders**
- **On-Call Contractor & specialty subs**

I-895 over Herring Run **REMEDIATION**



SECTION B-B: STAGE 5

Existing Sheetpile Wall & Embankment Reconstruction

I-895 over Herring Run **REMEDIATION**



Sheetpile Wall & Embankment Reconstruction

I-895 over Herring Run **REMEDIATION**



Sheetpile Wall & Embankment Reconstruction

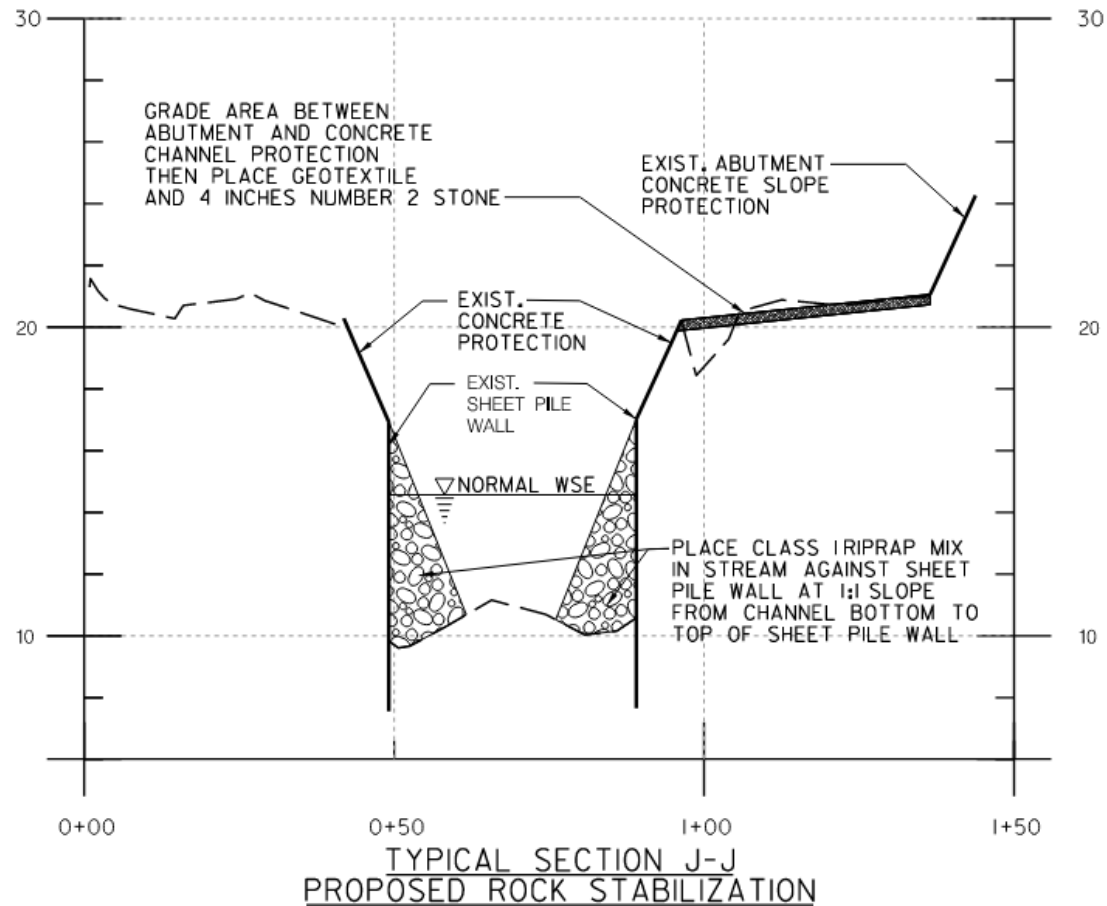
I-895 over Herring Run **REMEDIATION**



Stream Sediment Bar Grading

I-895 over Herring Run

REMEDIATION



Channel / Sheetpile Wall & Overbank Stabilization

I-895 over Herring Run

REMEDIATION



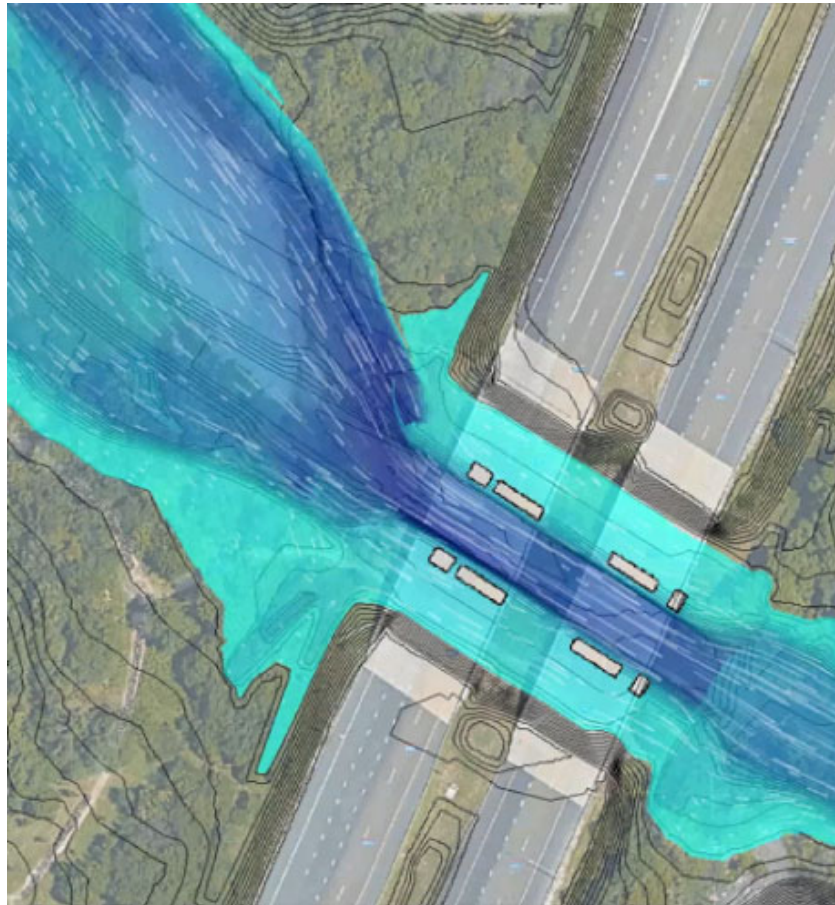
Before



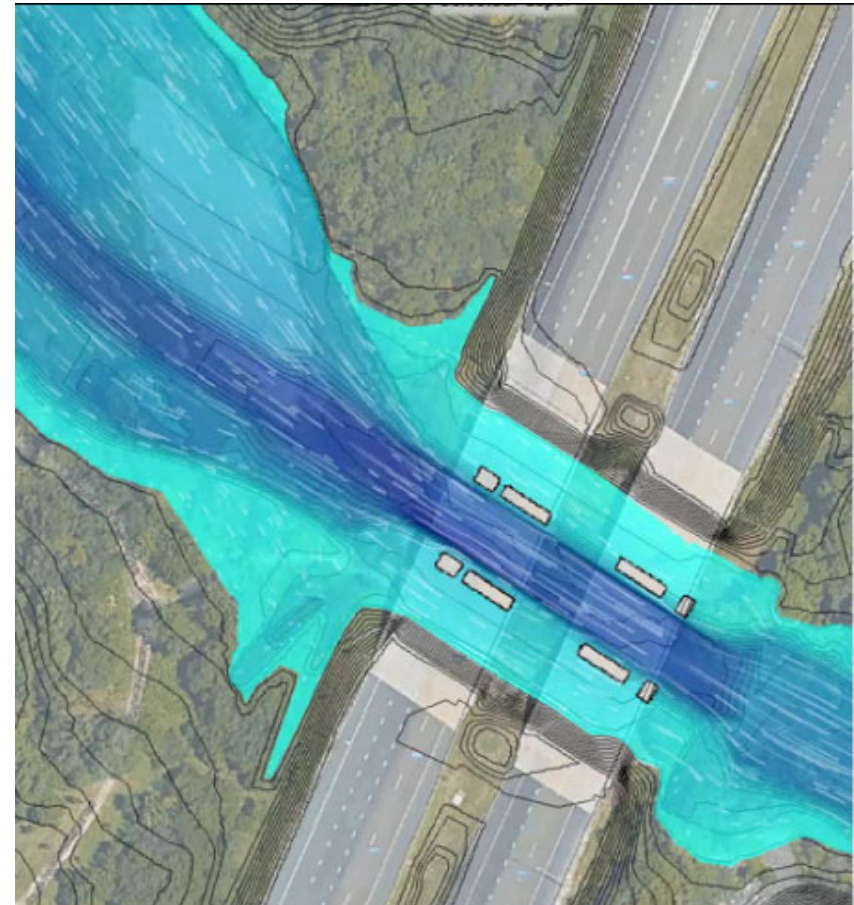
After

Channel / Sheetpile Wall & Overbank Stabilization

I-895 over Herring Run **REMEDIATION**



Flow Before Remediation

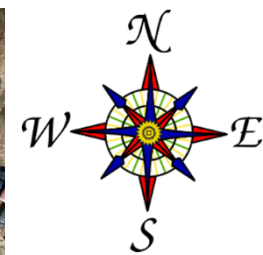


Flow After Remediation

I-895 over Herring Run **REMEDIATION**



2019



Before Remediation

I-895 over Herring Run **REMEDIATION**



2022

February 19, 2022

After Remediation

I-895 over Herring Run

SUMMARY

Summary

- **Bridge had multiple expansions**
- **Flashy ultra-urban watershed**
- **Stream angle of attack to bridge shifting**
- **Emergency Remediation included bridge and stream**
- **Future biennial bridge inspections to include the stream**
- **Future bridge remediation to include the stream**
- **Collaboration between Structures & Environmental Divisions**
- **Addressed environmental needs by addressing the stream and watershed dynamics**