# Cardinal School Stormwater Detention Vault

**Watershed Scale Anchor Project** 

## County-APS Partnership

September 22, 2021





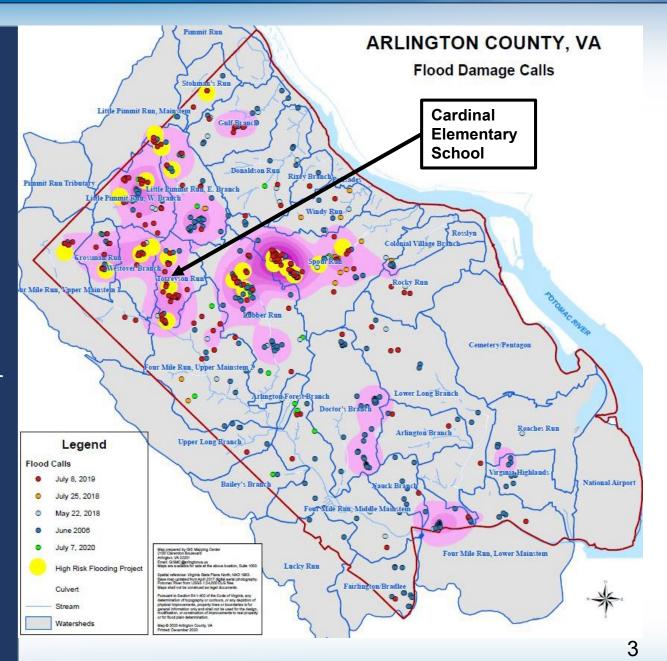
## Agenda

- Background
- Engagement to date
- Construction update
- Maintenance of traffic (MOT) plan
- Schedule and next steps

## A Call for Action

Map demonstrates flood calls from the following storms in relation to high risk flooding projects identified in Stormwater Master Plan:

- -July 7, 2020
- -July 8, 2019
- -July 25, 2018
- -May 22, 2018
- -June 2006



## **Cardinal School Site**

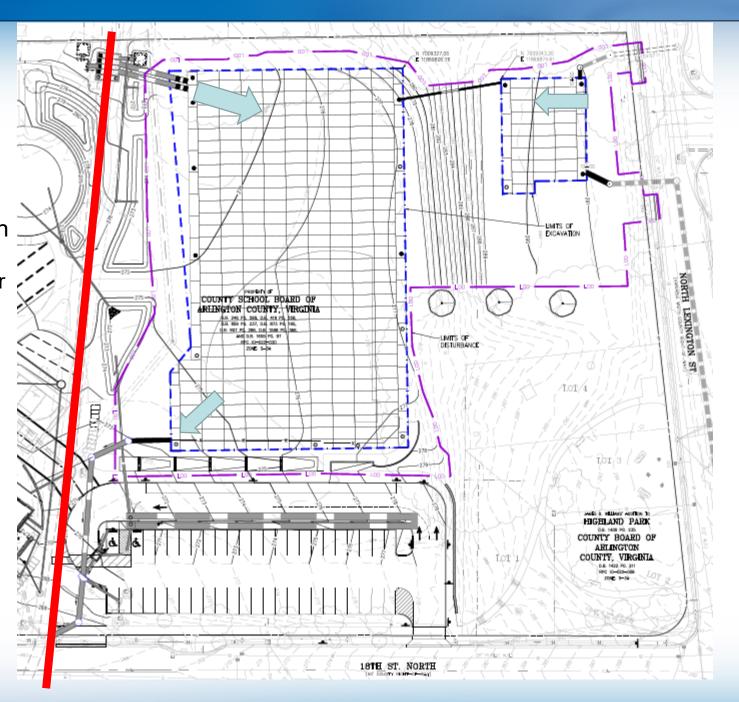


## Key Engagement Meetings to Date

- County/School Board December, 2020
- Four CAs in January/February with 30% plans
- Civic Federation February 16
- Sports Commission February 25
- Use Permit Hearing March 2
- County/School Board March, 2021
- C2E2 May 17
- 65% Design Public meeting May 26
- Final Design Public meeting July 28
- County Board/School Board Meetings September
- Lexington neighbors on-site meeting September 15
- Pre-construction meeting September 22
- Public engagement/outreach will continue through project completion

## Phase 2 Design

2 Vault Design reduces excavation near N Lexington St.



## Phase 2 Design (Main Vault 1)



ACCESS OPENING SIZES AND LOCATIONS, PIPE MATERIAL, PIPE DIAMETERS,	
AND PIPE LOCATIONS OF THE DRAWINGS DATED 9/10/2021 IN ADDITIO	N
YOU AGREE WITH THE GENERAL LAYOUT OF THE BASIN AND BASIN HEIGHT	,
MIN AND MAX COVER OVERTOP THE SYSTEM, DELIVERY NOTES AND ALL	1
SPECIFIC DESIGN ELEMENTS CONTAINED HEREIN. THE STRUCTURAL INTEGRIT	TY
OF THE SYSTEM IS THE RESPONSIBILITY OF STORMTRAP.	
GENERAL CONTRACTOR: DATE:/	_
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CIVIL ENGINEER: DATE://_	
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INSTALLING CONTRACTOR: CATE / /	
INSTALLING CONTRACTOR: DATE:/	
APPROVED: APPROVED WITH CHANGES: REJECTED:	

STORMTRAP

BY SIGNING THIS DOCUMENT YOU AGREE WITH THE PIPE INVERT ELEVATIONS,

THE STORMTRAP DRAWINGS SHALL NOT BE ALTERED OR MANIPULATED IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT OF STORMTRAP, USE OF THESE DRAWINGS IS STRICTLY GRANTED TO YOU, OUR CLIENT, FOR THE SPECIFIED AND NAMED PROJECT ONLY.

# SHEET INDEX PAGE DESCRIPTION 0.0 COVER SHEET 1.0 DOUBLETRAP DESIGN CRITERIA 2.0 DOUBLETRAP SYSTEM LAYOUT 3.0 DOUBLETRAP INSTALLATION SPECIFICATIONS 3.1 DOUBLETRAP INSTALLATION SPECIFICATIONS 4.0 DOUBLETRAP BACKFILL SPECIFICATIONS 5.0 RECOMMENDE PIPE / ACCESS OPPINIG SPECIFICATIONS 6.0 DOUBLETRAP MODULE TYPES

#### STORMTRAP CONTACT INFORMATION

STORMTRAP SUPPLIER: STORMTRAP
CONTACT NAME: SAMANTHA RITZ
CELL PHONE: 703-350-1206
SALES EMAIL: SRITZ@STORMTRAP.COM

#### StormTrap

PATENTS USTED AT: [HTTP://STORMERP.COM/PA

1287 WINDHAM PARKWAY ROMEDWILLE, IL 60446 P:815-941-4549 / F:331-318-5347

#### ENGINEER INFORMATION:

BOWMAN CONSULTING 13461 SUNRISE VALLEY DRIVE SUITE 500 HERNDON, VA 703-464-1000

#### PROJECT INFORMATION:

WALTER REED SCHOOL

VAULT 1

ARLINGTON, VA

CURRENT ISSUE DATE:

9/10/2021

ISSUED FOR:

APPROVAL

REV. DATE: ISSUED FOR: DW BY

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## (A) 09/10/21 APPROVAL L 3 08/16/21 APPROVAL L 2 06/22/21 PRELIMINARY L 1 06/16/21 PRELIMINARY L

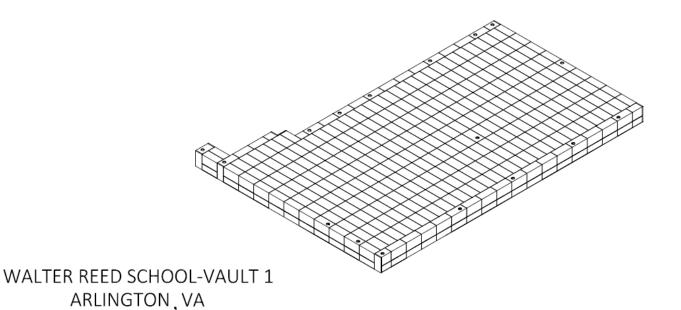
#### SCALE:

SHEET TITLE:

COVER SHEET

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## Phase 2

StormTrap modules were selected for the project





#### **Detention**

StormTrap underground stormwater detention systems temporarily store runoff in large underground chambers before releasing it at a controlled rate. This mitigates erosion, flooding and many of the other harmful effects of high volumes of stormwater runoff.

### **MOT Plan**

#### **During Working Hours**

#### Highlights:

- Left side of Lexington below 18<sup>th</sup> road will be reserved for construction
- 2-way traffic on Lexington (except by 18<sup>th</sup> road)
- Flaggers on Lexington near 18<sup>th</sup> Road
- No parking on Lexington between 18<sup>th</sup> St and 18<sup>th</sup> Road
- Upper part of Lexington sidewalk closed (part by park open)
- ROW hours are 9-4

Two-way operation Area of sidewal closure One-way operation No parking area Two-way operation

PARKING OF CONSTRUCTION AND STAFF VEHICLES IS PROHIBITED WITHIN THE PROPOSED EMERGENCY VEHICLE ZONE.

## Concerns about lane closure in MOT

- Staff met with Lexington St residents on 9/15
- Contractor will not need lane closure for full year (likely ~ 8 months)
- Some additional parking spaces added on 18<sup>th</sup> St
- Maintaining grid network is important for public safety on all surrounding roads

which afford access to within fifty (50) feet of all booths, tents, rides, and any other equipment, buildings, or structures used as part of, or in conjunction with, the special event.

## **MOT Plan**

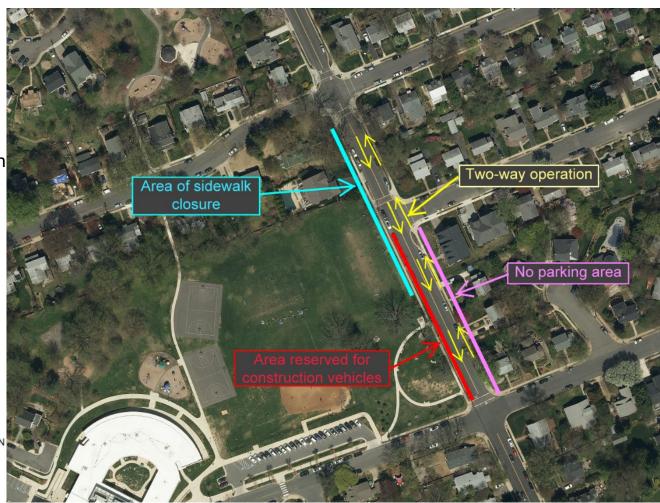
## During Non-Working Hours

#### Highlights:

- 2-way traffic along entire length of Lexington
- Left side of Lexington below 18<sup>th</sup> road will be reserved for construction
- Upper part of Lexington sidewalk closed (part by park open)

PARKING OF CONSTRUCTION AND STAFF VEHICLES IS PROHIBITED WITHIN THE PROPOSED EMERGENCY VEHICLE ZONE.

SAFETY FENCE TO BE MOVED BACK, AFTER CONSTRUCTION HOURS, TO ALLOW FOR 2-WAY TRAFFIC (10' MIN LANE WIDTH) AT THE INTERSECTION OF NORTH LEXINGTON STREET AND 18TH ROAD NORTH. FENCE TO BE RESET, AS SHOWN ON SHEET C-14.00, AT THE BEGINNING OF THE DAY AND INTERSECTION TRAFFIC TO BE GUIDED BY FLAGGERS AT ALL TIMES DURING CONSTRUCTION HOURS.



## Site Access Plan

ARLINGTON COUNTY RIGHT-OF-WAY WORK HOURS:

- MON –FRI: 9:00 AM TO 4:00 PM
- SAT-SUN AND HOLIDAYS: 10:00 AM TO 6:00 PM

WORK OUTSIDE THESE HOURS WILL REQUIRE SPECIAL PERMISSION BY THE ARLINGTON COUNTY ZONING ADMINISTRATOR.

PROJECT DURATION: APPROX. 10 TO 12 MONTHS
NORTH LEXINGTON STREET: APPROX. 7 TO 10 MONTHS

#### SITE ACCESS PLAN FOR CONSTRUCTION VEHICLES



#### **Schedule and Next Steps**

- Pipe connection to Vault 2 from North Lexington St. is underway, should be done be end of September
- School Board approved change orders and funding was approved at County Board Meeting, final School Board approval 9/30
- Final steps before construction:
  - Finalize cost proposal
  - Issue Notice to Proceed (NTP)
  - Begin construction administrative activities
- On-site construction start late October/early Nov
- December 8, 2021 Next community meeting (tentative)

#### Other Issues

- Coordinating with Police for additional patrols to avoid early AM noise issues.
- Dust project will use water on site and street sweeping on Lexington to control dust.
- Reporting issues at construction site go through APS project manager.
- Trees we are working with arborist to protect and save large trees near the site, but with any construction project there is some risk

## Questions?

#### **Project Team**

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#### **Project Manager**

Ajibola (Aji) Robinson PMP. Project Manager, C. 571-238-0334 E. <u>ajibola.robinson@apsva.us</u>

#### **Project Websites**

https://projects.arlingtonva.us/projects/reed-school-stormwater-vault/

https://www.apsva.us/design-and-construction/cardinal-elementary/