

Sunset Hills Road Drainage Improvement Project

Flood Mitigation Project

Department of Public Works and Environmental Services
Working for You!



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Stormwater Program Drivers

- Municipal Separate Storm Sewer System Permit (MS-4)
- Chesapeake Bay Total Maximum Daily Loads (TMDL)
 - Regulates amount of pollutants in waterways (Nitrogen, Phosphorus and Total Suspended Solids)
- Local TMDLs (sediment, bacteria and PCBs)
- Dam Safety Regulations
- Maintenance of Existing Facilities and public infrastructure
- Public Safety and Emergency Response



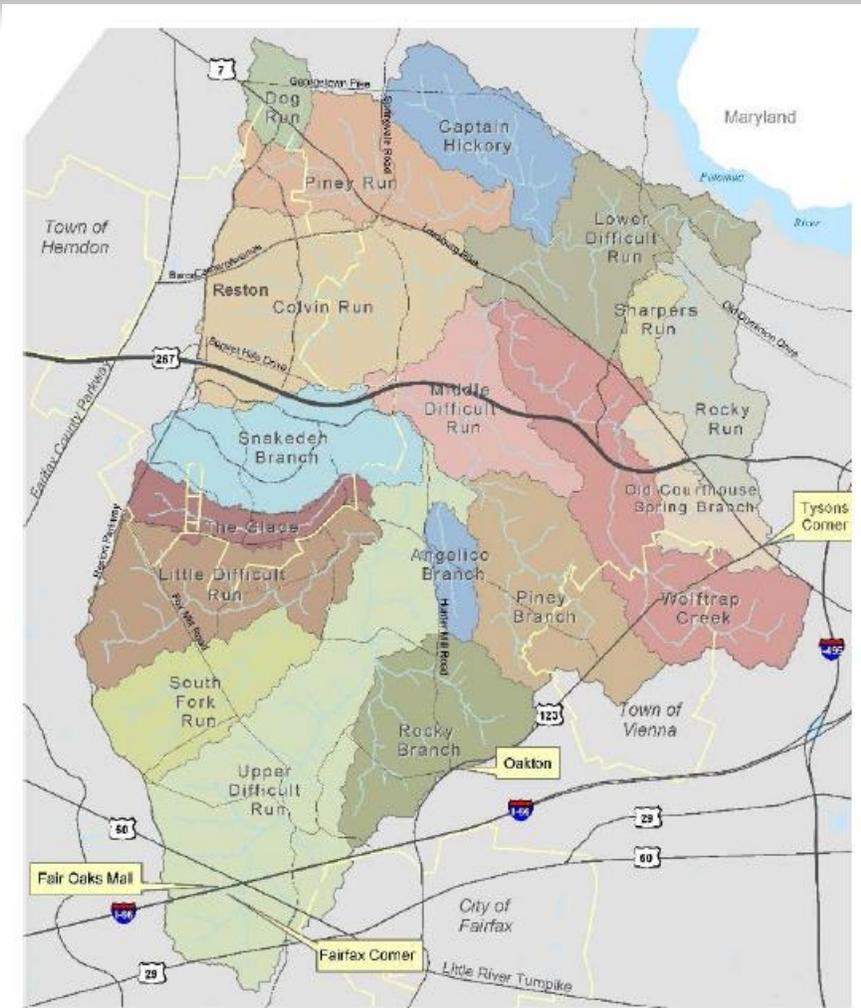
Project Goals

- Mitigate the frequent flooding on Sunset Hills Road
- Relieve the pressure on the W&OD trail embankment
- Provide water quality benefits



Difficult Run Watershed

- 58 mi² in Fairfax County
 - 18% impervious
 - 18 subwatersheds
- Discharges into Potomac River
- Middle Difficult Run 2.69 mi² (1,721 Acres)
 - 14% impervious

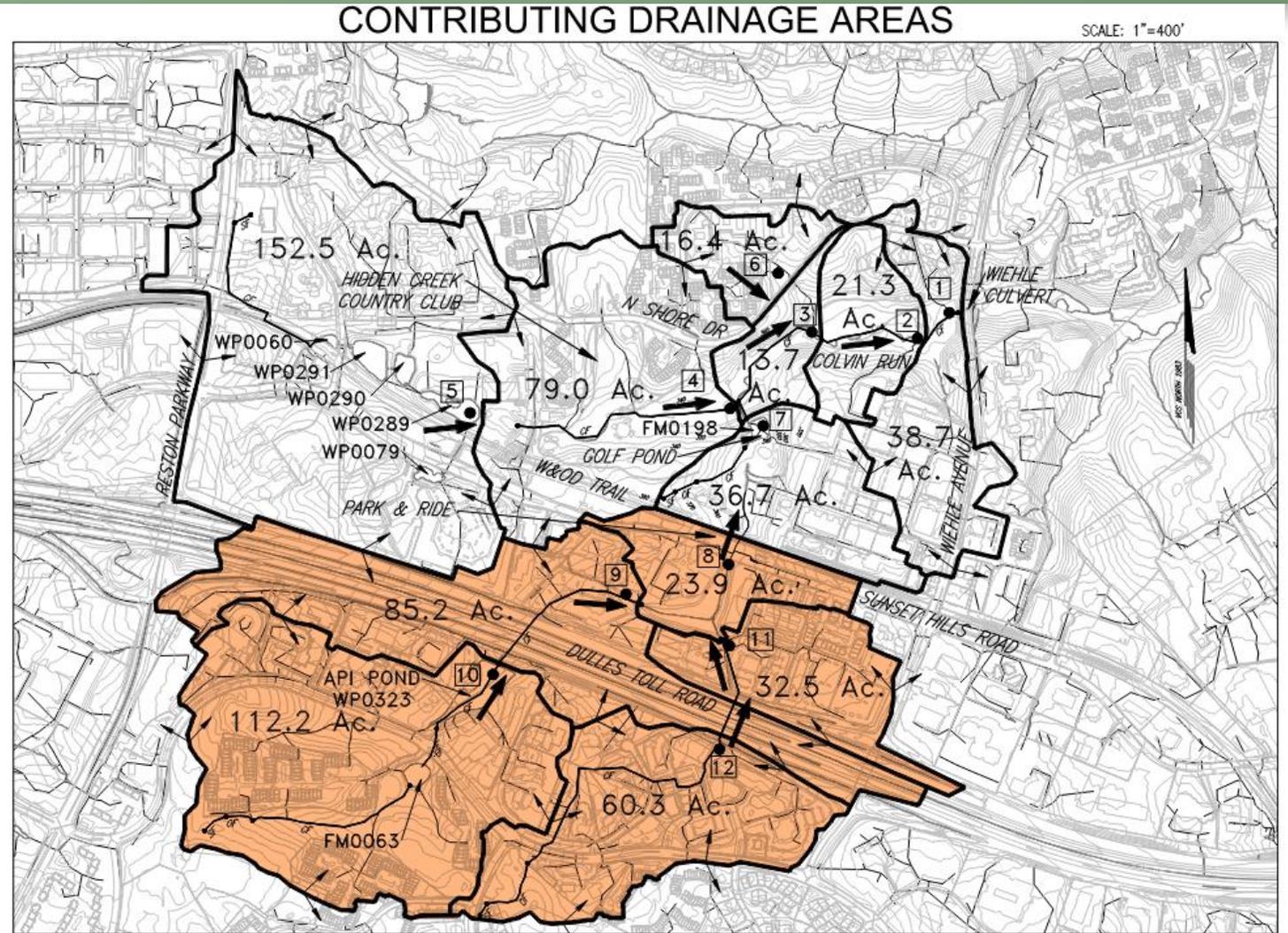


Difficult Run Watershed Management Plan



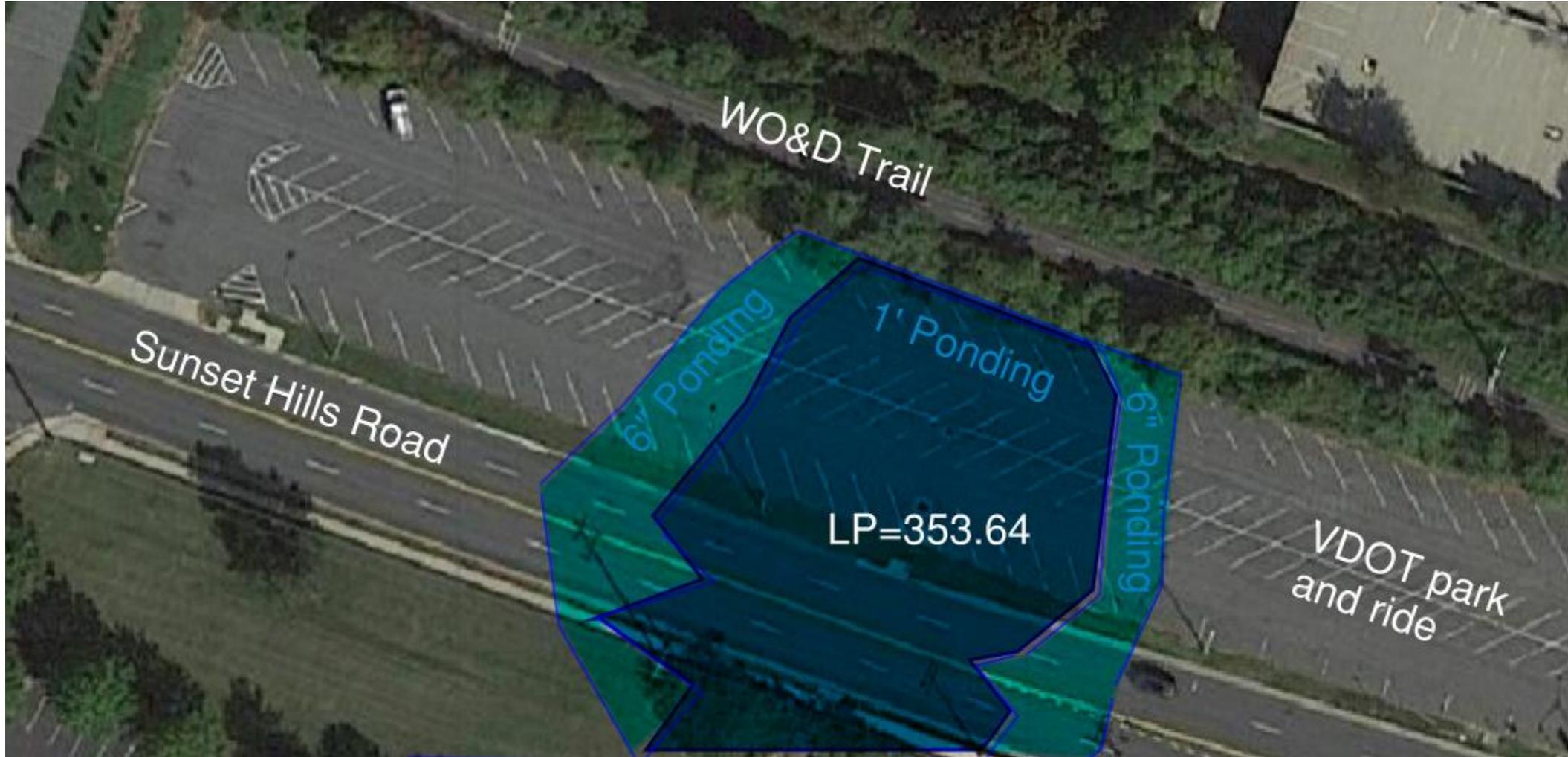
Project Watershed

- 314 acres drain to VDOT park and ride lot
 - 48% Impervious
 - Includes area south of the toll road



Existing Conditions – Flooding Elevations

- 1yr = 348.99
- 2yr = 350.34
- **10yr = 354.86**
- 25yr = 357.72
- 50yr = 359.52
- 100yr = 361.10

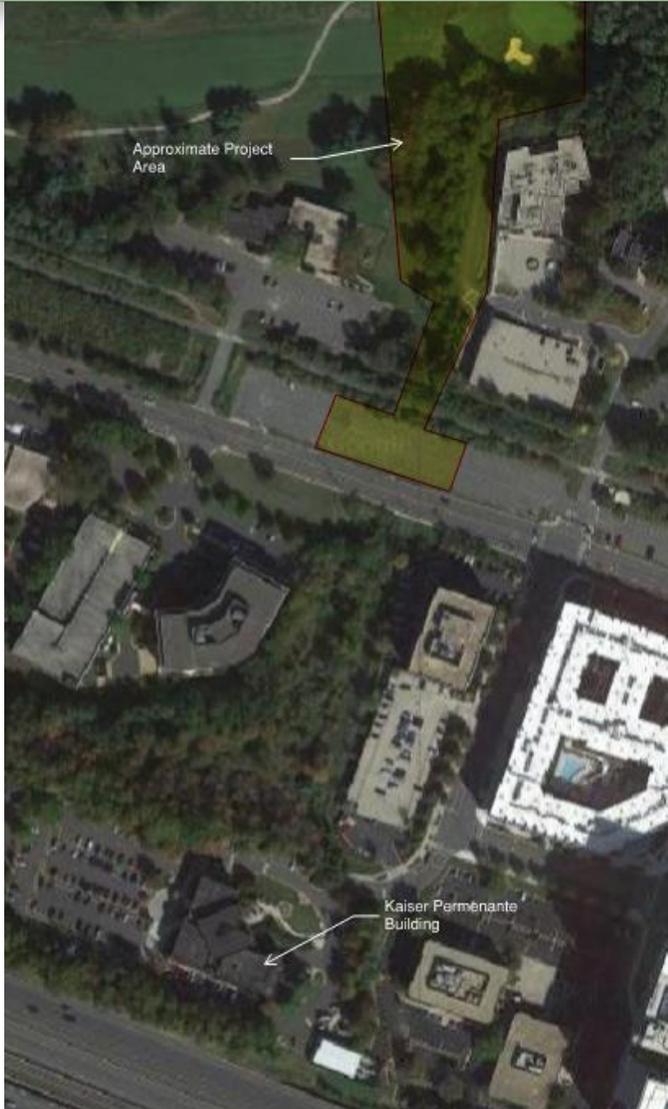


Existing Conditions



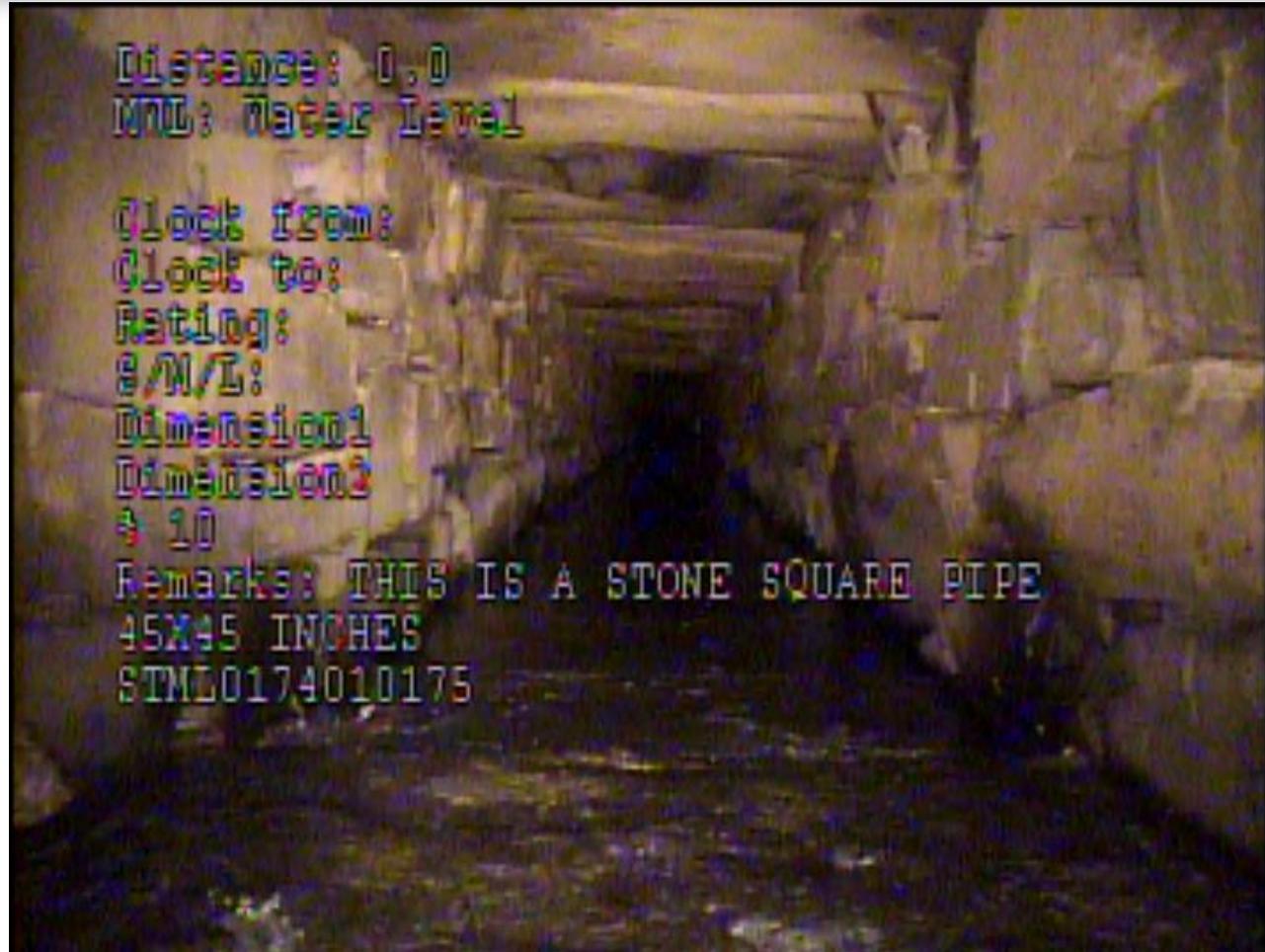
Park and ride flooding Tropical Storm Lee 2011

Existing Conditions



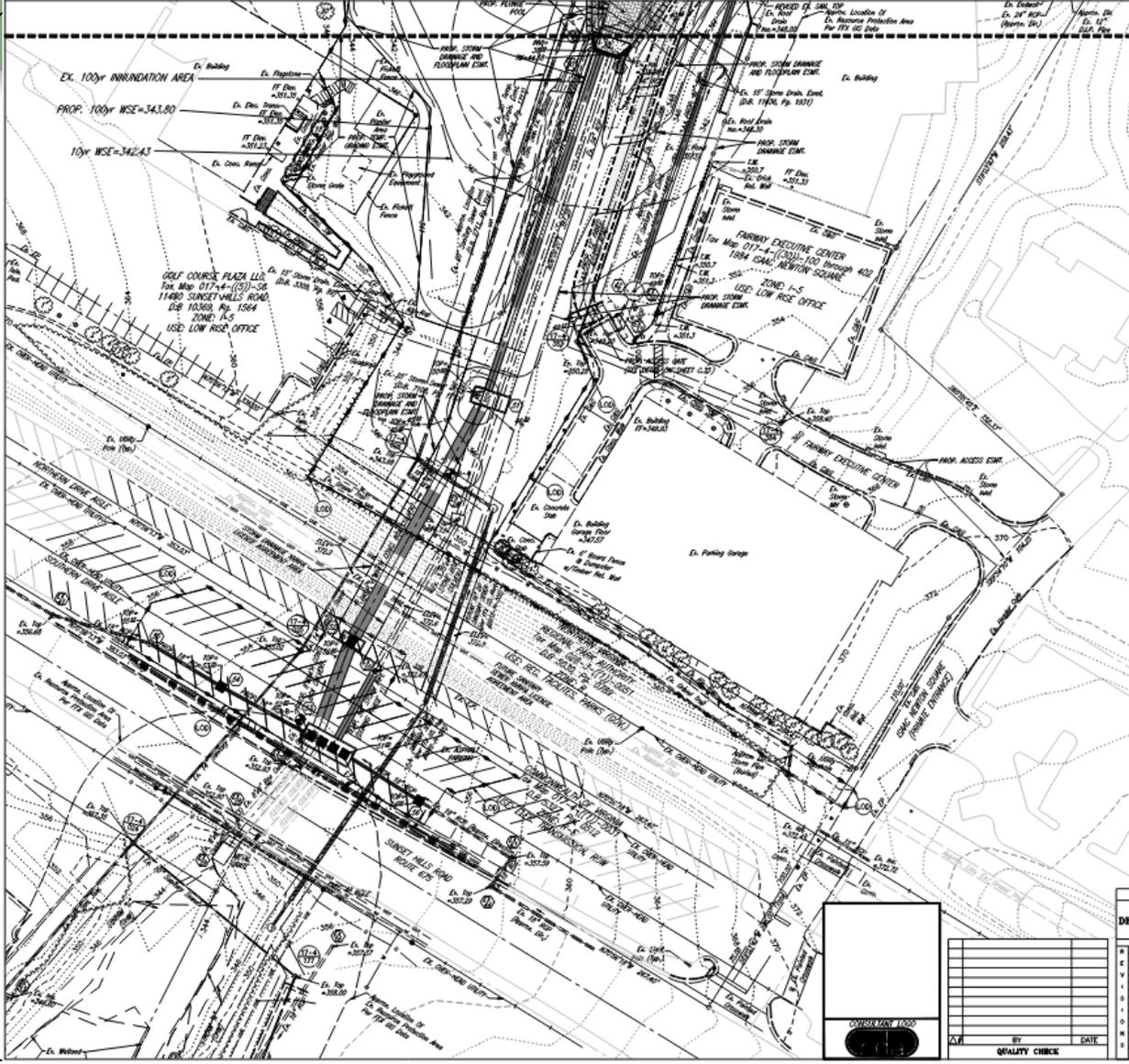
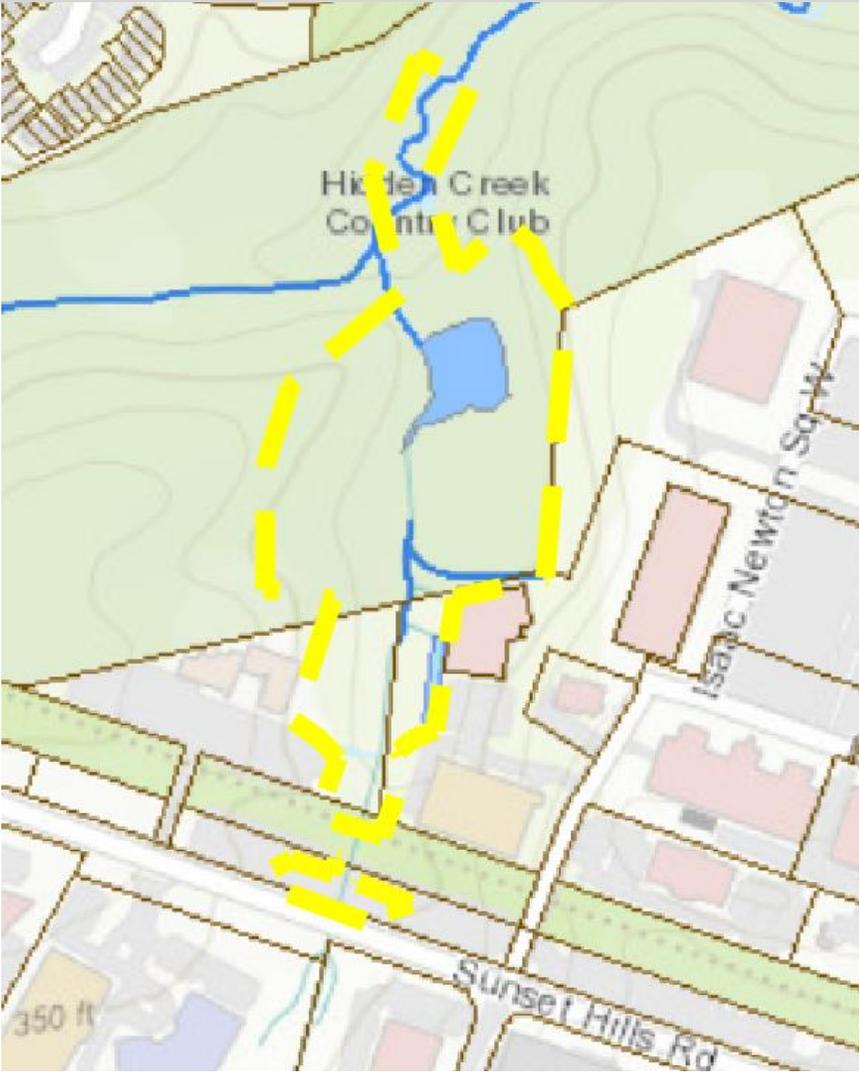
Flooding at Kaiser Permanente Building

Existing Conditions



Culvert under WO&D trail built approximately 1850s

Proposed Conditions



Existing Conditions



Existing Golf Course Pond

Comparison Renderings

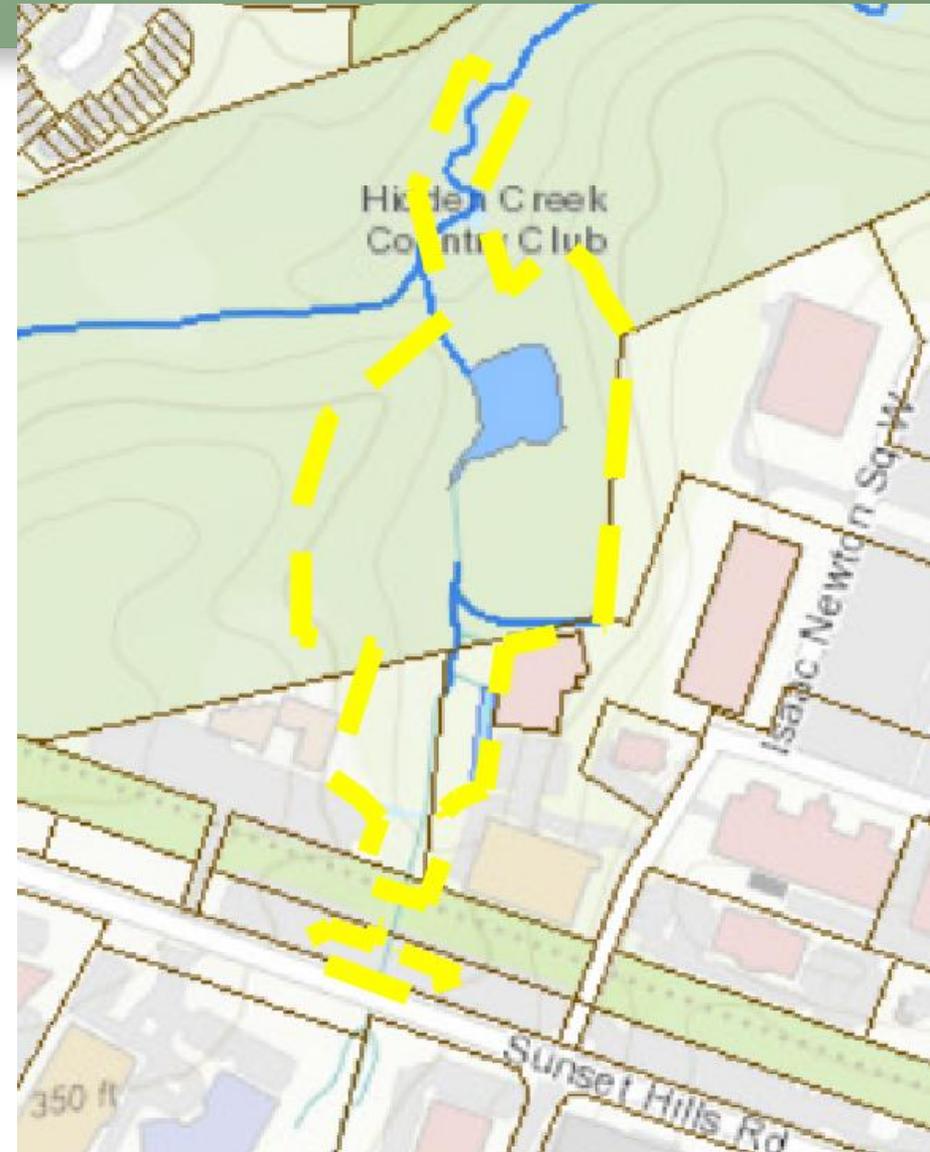


Proposed Conditions



What's Next?

- Secure Land Rights
- Final Design
- Design Complete/Permitting
- Construction



Contact Information

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www.fairfaxcounty.gov/public_works/stormwater

To request this information in an alternate format call 703-324-5500, TTY 711



Online Resources

Stormwater Planning Division Website

<http://www.fairfaxcounty.gov/publicworks/stormwater/>

Fairfax County Watershed Planning

<http://www.fairfaxcounty.gov/nvswcd/newsletter/planning.htm>

Difficult Run Watershed Plan

<https://www.fairfaxcounty.gov/publicworks/stormwater/difficult-run-watershed>

EPA Water Quality Laws & Regulations

<https://www.epa.gov/wqs-tech/federal-water-quality-standards-requirements>

